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Committee on the Peaceful Uses of Outer Space

407th Meeting
Tuesday, 13 June 1995, 10 a.m.
Vienna

Chairman: Mr. Hohenfellner . . . . . (Austria)

The meeting was called to order at 10.05 a.m.

General exchange of views *(continued)*

The Chairman: Before calling the first speaker I should like to remind representatives that, according to the agenda we adopted yesterday, we shall continue our general debate this afternoon and tomorrow morning. It is my intention to close the list of speakers on this agenda item at the end of this morning's meeting. I therefore urge all representatives wishing to speak on the item to add their names to the list of speakers before them. I am determined to ensure that the Committee functions in a disciplined manner. Bearing in mind my request that members be here on time, I am a little discouraged at the attendance. However, I am determined to start meetings punctually at 10 o'clock in the morning and 3 o'clock in the afternoon.

Mr. Chandrasekhar (India): My delegation is very pleased to see you, Sir, once again in the Chair guiding the proceedings of the Committee at its thirty-eighth session. Your rich experience and well established skill in successfully guiding the Committee in the past provide us with a good basis to expect that this session too will conclude successfully under your chairmanship.

My delegation would like to take this opportunity to place on record its sincere appreciation and gratitude to Professor John Carver for the outstanding and brilliant manner in which he guided the Scientific and Technical Subcommittee during the past 25 years. We learned regretfully of his decision to stand down from the chairmanship of that Committee. Professor Carver set a great example of leadership and of a tradition of success. The achievements of the Scientific and Technical Subcommittee during his long tenure added new dimensions to the history of international cooperation in the field of outer space.

As the Committee is meeting for the first time following the latest expansion of its membership, my delegation would like to welcome all new members and express its confidence that their participation will enrich the work of the Committee on the Peaceful Uses of Outer Space and its subsidiary bodies.

I should like to take a few minutes to inform delegations of the recent progress in space activities in India. The current year is a very busy one for the Indian Space Research Organization (ISRO) in view of the preparations for the launching of three satellites serving different missions. The first of these is an advanced version of the Indian Remote Sensing Satellite IRS-1C, which is scheduled for launch towards the end of this year. IRS-1C carries both multispectral sensors and a panchromatic camera system, which are capable of providing data of about 23 metres and 6 metres' resolution respectively.

The satellite also incorporates a wide-field sensor payload useful for monitoring vegetation and capable of providing data of 180 metres' resolution in two spectral bands over a swath of 800 kilometres. Data from IRS-1C will be available on a global basis. Another launch scheduled for the latter part of this year is the next Indian multi-purpose satellite, INSAT-2C. This satellite carries payloads for telecommunications and television broadcasting and includes a transponder for mobile communications. It will serve to develop further the operational services

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already established through its predecessors, INSAT-2A and INSAT-2B. Another major milestone scheduled to be passed is the next developmental flight of the Indian Polar Satellite Launch Vehicle, which will put into orbit an IRS-P3 satellite. The IRS-P3 will carry a three-channel wide-field camera, an X-ray payload from ISRO and a modular opto-electronic scanner developed and owned by the German Aerospace Research Establishment (DLR).

Activities relating to the promotion of international cooperation progressed well, as they had in the past. A team from the United States National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration (NOAA) of the United States of America visited ISRO to discuss mutual cooperative activities, and as a result several potential areas for cooperation have been identified in the field of earth sciences and climate studies. ISRO also held bilateral discussions with agencies such as the National Centre for Space Studies (CNES) and the European Space Agency (ESA) to review the progress of earlier agreements.

As a follow-up measure to the Ministerial Conference on Space Applications for Development held last year, India has been actively participating in the regional space programmes for sustainable development. Several opportunities were also provided for personnel from other developing countries to receive training in space applications, under the aegis of the SHARES Programme, which is being implemented by the Indian Space Research Organization. India also contributed actively to the activities of international organizations and bodies such as the International Astronautical Federation (IAF), the Committee on Space Research (COSPAR), the Committee on Earth Observation Satellites (CEOS) and the International Telecommunication Union (ITU).

My delegation would now like to draw attention to an important subject which we have been debating extensively over the last few years. This relates to the question of convening a third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE). During our debates on the subject of such a conference, we have considered aspects such as objectives, goals, agenda, funding and organizational matters. At our Committee's thirty-seventh session, last year, we agreed that a third UNISPACE could be convened in the near future. Further, in order to facilitate the formulation of recommendations on the agenda, venue, funding and a date for the conference, extensive discussions took place during the thirty-second session of the Scientific and Technical Subcommittee, which was held during February 1995. This effort culminated in the development of many common views on the opportunity, objectives and organization of the conference. An indicative agenda comprising a number of substantial items was also developed for further consideration. As a part of our deliberations, we also pursued an examination of other means of achieving goals set for the conference.

On the basis of all this background work, and also noting the possibilities for fruitful deliberations during the present session, we believe that an early conclusion of this matter is possible. It is necessary that a conclusive recommendation on the conference be made during the current session, and my delegation looks forward to a conclusion on this matter during the current session. We urge that efforts for finding a conclusive answer be initiated during the early part of the session.

Let me briefly touch upon the progress of the United Nations Centre for Space Science and Technology Education in our region. As reported earlier, subsequent to the intimation by the United Nations of the decision to start the Centre in India, we took several steps towards its implementation. A planning meeting with international participants and participants from the United Nations Secretariat and the Economic and Social Commission for Asia and the Pacific (ESCAP) was held during January 1995. Subsequently, a draft agreement dealing with the Centre's status and organizational aspects was circulated to the countries of the region. Encouraging responses were received from several Member States. It is planned that agreements with Member States will be concluded by the end of July and further steps will be initiated for the functioning of the Centre. Several preparatory activities, including the construction of hostels for participants and the preparation of draft curricula for the courses, are under way. We look forward to the start of the Centre's operations in a few months, with the cooperation of various Member States of the region.

Turning to the work of the Subcommittees during the current year, we are very pleased with the extensive level of work carried out by the Scientific and Technical Subcommittee, as well as the progress made on new agenda items, such as that concerning space debris. We also note that the Legal Subcommittee conducted important deliberations, although the progress was slow. We plan to deal with these items later, when they are taken up for discussion.

Mr. Fernández (Chile) (*interpretation from Spanish*): I should like to join others in congratulating you, Mr.

Chairman, on your resumption of your office and on your record as Chairman of this Committee for so many years.

The Chilean delegation is attending this thirty-eighth session of the Committee on the Peaceful Uses of Outer Space (COPUOS) with justified expectations for dealing with the agenda and for the conclusions to which our work can lead. We believe that our session this year, when the United Nations is commemorating half a century of existence, is especially conducive to a reiteration of our commitment to its history, principles and institutions. Our country is firmly convinced that the United Nations system constitutes the principal foundation on which the international order of our times is based and the principal guarantee that conflicts and crises will be settled through law and peaceful means.

In this context, the Chilean delegation wishes, first of all, to contribute to this general exchange of views a brief report on our country's activities in space matters and, secondly, to express our views on certain agenda items.

Institutionally, our Government has continued to take decisions aimed at the establishment of a national body is responsible for space affairs. In March this year, His Excellency the President of the Republic decreed a modification of the rules governing Chile's Committee on Space Affairs, expanding its membership and functions and assigning to it the task of formulating a proposal for space policy and a corresponding organic structure within the next six months. As a result of that decision, our country will have a new institutional structure for space affairs next year.

A second activity which we wish to report to the Committee is our country's full compliance with the tasks which it undertook as the headquarters of the *pro tempore* Secretariat for the Second Space Conference of the Americas. Of particular significance in this respect was the holding of a meeting of the Heads of the Latin American space agencies in Santiago, Chile, from 28 to 30 November 1994.

The third point is the imminent launching of the first Chilean satellite, possibly in August this year, by a Ukrainian Tsiklon rocket. This will be a microsatellite called Fasat-Alfa, developed by the Chilean Air Force and the National Aeronautics Corporation in cooperation with the University of Surrey. Its character and functions are of an eminently experimental nature and are designed to meet the requirements of environmental, meteorological and educational development in my country.

With regard to the proposed agenda for this session, our delegation would like in particular to express its opinion on certain subjects that it deems relevant.

It would seem appropriate for the Committee to make a pronouncement on the need to reiterate that outer space represents a field and a resource available to all humankind for carrying out activities that promote peace, security, development and international cooperation.

In order to achieve those objectives, the Committee should have available to it the means and resources — both scientific and technological as well as legal and political — that will make it possible fully to meet that objective. To this end, we propose that the institutional structure of the Committee be reviewed and adapted to the new requirements and trends of the international system. For this purpose, we propose that both the Legal Subcommittee and the Scientific and Technical Subcommittee incorporate into the agenda of their coming meetings a study of the institutional nature of the Committee.

Secondly, we are particularly interested in defining the creation of a regional centre for Latin America and the Caribbean, whose establishment has been the subject of negotiations in the various forums that deal with international space relations, both among countries and within the Secretariat itself. We understand that space research must necessarily be linked to the solution of development problems, and the functioning of a body of this sort would considerably increase awareness of and cooperation in such matters. It would also considerably increase the region's negotiating capacity to obtain support for research projects on space matters. We therefore reiterate our concern that a decision should be adopted on this issue.

Meanwhile, we propose that the Legal Subcommittee might consider, at its next meeting, incorporating in its agenda consideration of the general principles of international law on the environment from a comparative point of view.

Finally, our delegation would like to reaffirm its conviction that a third UNISPACE Conference should be held before the end of the century. We would insist on reiterating what we said a year ago: that the profound changes that have taken place in the world over the last decade provide not only a favourable context but also an unprecedented opportunity for a world forum on space that would be broad-ranging, free and auspicious. We believe that through this initiative, we can give a major impetus to

the peaceful uses of outer space and at the same time strengthen the United Nations system at this crucial stage for humankind.

I should like to add that our proposal concerning this Conference appears in the documentation on this subject, and we would like to refer to this in our next statement. As has already been said at this meeting, we would therefore suggest that the Commission should recommend to the General Assembly that it consider convening a third UNISPACE before the end of the year 2000.

Mr. Tófalvi (Hungary): I should like to discuss the four main characteristics of the space activities we have undertaken since the last meeting of the Committee on the Peaceful Uses of Outer Space, in June 1994.

Topics I will touch on include our new cooperation agreements with other countries; programmes and projects in which we have been active for years in the framework of international cooperation; new programmes and projects in which we would like a creative partnership with others in future; and our opinions about the possibilities for regional and international cooperation in Central Europe.

Last May, the National Space Agency of Ukraine and the Hungarian Space Organization signed a cooperation agreement in the field of space activities. Ukraine later suggested several projects for cooperation, of which three could be incorporated into our programme. Consultations with experts are being organized on mutually acceptable topics.

In January the Russian Space Agency and the Hungarian Space Organization signed a cooperation agreement, and a Government-level agreement is being prepared between the two countries. We hope to be able to continue the creative cooperation that characterized the INTERCOSMOS era.

Indian experts have successfully completed their revision of the cooperation projects, as suggested earlier by Hungarian experts. We have prepared a cooperation agreement between the Indian Space Research Organization and the Hungarian Space Organization which is ready for signature. We hope it will be signed this September in Bangalore. We are convinced that this agreement will open up new prospects for cooperation between India and Hungary, to the mutual benefit of both countries. It is yet another example of the kind of cooperation that exists between the European Space Agency (ESA), the United States National Aeronautics and Space Administration (NASA) and the Russian Space Agency and the Hungarian Space Organization. It also sets up a collaboration between a space Power — India — and a small country with remarkable experience in space research.

Hungary recognized that, as a small country, it should carry out its space activities in broad international cooperation with several partners. This is clear from those projects in which we have been active for years within the framework of international cooperation. We are participating in the CESAR project with a number of other countries within the framework of the Central European Initiative. The CESAR satellite will be launched later this decade with four Hungarian scientific instruments on board.

We are also participating in three ESA projects. In the field of remote sensing, we joined the CORINE land cover and the ERS-1 data-processing projects. The ESA Cluster satellites will be launched later this year, with a few Hungarian-built electronic parts on board. We are also participating in the Cluster Science Data System.

The ESA Euromir mission will begin this summer. A part of its dosimetric programme will be carried out by the Hungarian-built PILLE thermoluminescent dosimeter. Hungary is also building two pieces of electric ground-support equipment for NASA's Cassini space probe to Saturn. In addition, a space furnace, the Universal Multizone Crystallizator, designed and developed by Hungarian engineers, is now undergoing a one-year test at NASA's Marshall Space Flight Centre. We are also participating in two Russian programmes: Spectrum-Roentgen-Gamma and Mars-96.

In future, we would like to participate in various other international projects. For instance, we would like to take part in the ERS-2 programme with ESA, and we have held preliminary discussions on the possibility of Hungarian participation in the NASA-Mir programme with the newly developed version of the PILLE dosimeter, and in the RoLand cometary lander with some onboard electronic equipment.

At previous sessions of the Committee, we have repeatedly emphasized the extraordinary importance of regional and international cooperation in the new era of space research, not only in Central Europe but worldwide. We were very glad when in early 1992 the Central European Initiative made cooperation in the field of space research one of its goals. It was especially promising that the Central European Initiative planned this regional international cooperation in close collaboration with ESA.

Although there was a deadlock in 1994 in the CESAR programme, this year it seems to be continuing according to the original plan.

The true value and importance of such international cooperation can be particularly appreciated by those who know that small countries can utilize their intellectual potential only as an integrated part of the worldwide network of international cooperation. Small countries are exceptionally sensitive to the problems of international cooperation, especially to those of regional cooperation in the field of space activities, because the effectiveness of the space activities of these countries is determined primarily by their international relations.

Mr. Fulda (Germany): Let me at the outset, Sir, extend to you my delegation's congratulations on your continued chairmanship of the Committee on the Peaceful Uses of Outer Space. I should like to express my gratitude to the Chairmen of the two Subcommittees for their efforts in promoting constructive dialogue and in bringing about viable solutions in various matters of substance. My delegation's gratitude also goes to the Committee Secretary and his colleagues in the Office for Outer Space Affairs for their support of the Committee's deliberations.

The past year since our last meeting has been marked by numerous German space activities in various fields. First and foremost is the flight by the German Ulf Merbold, in his capacity as an astronaut of the European Space Agency (ESA), to the Russian space station Mir. He is the first European astronaut to participate in both a United States and a Russian manned mission.

One great step forward in the exploration of the Earth through remote sensing was made with the first flights of the German/Italian radar instrument SIR-C/X-SAR on board the space shuttle. Among other things, this instrument proved its ability to trace pollution in the oceans. Germany is also the prime contractor for ESA's second ERS remote-sensing satellite, which was launched recently and is currently performing a very interesting tandem mission with its still-operational predecessor ERS-1. The high importance Germany attaches to Earth observation is also reflected in the efforts of the German Space Agency DARA during its presidency of the Committee on Earth Observation Satellites (CEOS) in 1994.

Taking advantage of the miniaturization of technology, German activities in the field of small satellites have been stepped up by four missions — Bremsat, Tubsat, Safir and GFZ-1 — during the past year.

In the near future, particularly exciting phases of extraterrestrial missions with important contributions by Germany will begin. Ulysses will start its north pole passage of the sun and Galileo will approach Jupiter and eventually enter its atmosphere. This year we also celebrate five years of successful operation of the roentgen (x-ray) satellite ROSAT, which has produced extremely interesting insights into the structure of our universe. For the second half of this year, we also look forward to the first flight of Ariane 5, which was developed with considerable German contributions. We expect this new launcher to continue the commercial success of its predecessor, Ariane 4.

Turning now to the last session of the Legal Subcommittee, I wish to recall the fruitful dialogue that ensued from the presentation of a German-French working paper on the issue of space benefits. We hope that the ideas in that paper will lead to further progress on that subject.

My delegation welcomes the adoption by the Scientific and Technical Subcommittee of a multi-phase work plan on the issue of space debris. Germany considers space debris to be one of the most serious threats to any further peaceful use of outer space. We will therefore actively participate in the deliberations of the Scientific and Technical Subcommittee on that matter.

We also note that the Principles Relevant to the Use of Nuclear Power Sources in Outer Space have proved satisfactory and that the Subcommittee has since decided that a revision of the Principles was not warranted.

As to the holding of a third UNISPACE Conference, we appreciate the Subcommittee's decision to consider the issue further in its entirety, including the options to achieve the goals pursued through other approaches, for example by restructuring the agenda of the Scientific and Technical Subcommittee. On this note, I wish to recall what I said at last year's session on the working methods of this Committee and its Subcommittees, especially with regard to the duration of their sessions. In the light of budget cuts in the United Nations as well as at the national level, I suggest we take some time to discuss how we could make our meetings even more efficient, exploring for instance the possibilities of shortening, streamlining and rescheduling our sessions.

May I conclude my initial remarks by expressing the hope that the spirit of cooperation will again prevail and that this session will result in progress for the benefit of the peaceful uses of outer space.

Mr. Fiuza Neto (Brazil): Allow me to begin my remarks by expressing my delegation's appreciation at seeing you, Sir, once again presiding over the deliberations of the Committee on the Peaceful Uses of Outer Space. Your proven experience and dedication to this Committee will again be needed in the present session, given the important matters we face in the days ahead. Once again, you can be sure of the full cooperation of the Brazilian delegation.

My delegation would also like to express its appreciation to the host country for its hospitality and to the Secretariat for the efficient preparation of this meeting.

It is also with great satisfaction that my delegation welcomes the new members of the Committee: Cuba, Kazakstan, Republic of Korea, Malaysia, Nicaragua, Peru, Senegal and South Africa. We trust that they will contribute positively and constructively to our deliberations and will further enhance the Committee's work.

Before moving on to the substantive items of our agenda, I should like to extend a word of sincere gratitude to the former Chairman of the Scientific and Technical Subcommittee and to the Chairman of the Legal Subcommittee, Mr. John Carver and Mr. Václav Mikulka respectively, in recognition of their essential roles in ensuring the successful conclusion of the highly productive 1995 sessions of those subsidiary bodies. Concerning Mr. Carver, we would like once again to express our regret at his decision to relinquish the position of Chairman of the Scientific and Technical Subcommittee, in which he has served with distinction for the past 25 years.

On the threshold of the fiftieth anniversary of the United Nations — a time for stock-taking and assessment of the contribution made by the Organization to the international community — we are confident that COPUOS and the United Nations will continue to play an ever-increasing role in the field of international cooperation on the peaceful uses of outer space.

But as recent discussions in this Committee and its two subsidiary bodies have indicated, our aims have now become much more complex: we must strive to address international cooperation in outer space in all its aspects, be they political, economic, environmental or, indeed, security-related. Peace and development being intimately intertwined, as is demonstrated in other forums of the United Nations, one of the overall concerns of delegations should be to narrow the technological gaps that still separate developing from developed countries.

In this connection, the ongoing discussions in the Legal Subcommittee on the item regarding outer space benefits reflect the best way in which this Committee can deal with the matter of international cooperation in an all-encompassing manner. We believe that the discussions of last March represented a significant step forward towards consensus on this matter. We therefore hope that the exchange of views in the present session will further enhance the understanding of this significant item. Brazil is convinced that, should there be a third United Nations Conference on the Exploration and Peaceful Uses of Outer Space — a third UNISPACE — this important theme of space benefits could enrich our substantive discussions.

In relation to the environmental aspects of international cooperation in outer space, recent years have witnessed the emergence of a growing awareness of the unique means that space technology offers to monitor and protect the environment. As this awareness increases, the international community will eventually turn to the skies and question why the outer space environment, as an extension of the Earth's environment, has not yet been the object of comprehensive treatment by this Committee. Here is another theme that could very well be part of our discussions in a possible third UNISPACE.

Indeed, when the General Assembly, in resolution 49/34, decided to include "space debris" among the items for the priority attention of the Scientific and Technical Subcommittee, this decision was taken only one year after the item had first been included in the agenda of that subsidiary body — an indication, in our view, that this Committee should not be overtaken by events.

In this spirit, the Brazilian delegation welcomed the realization of the symposium on "technical and policy issues related to the use of the space environment", sponsored by the International Institute of Space Law and the Institute of Air and Space Law a few months ago, on the occasion of the thirty-fourth session of the Legal Subcommittee. We hope that this initiative will open the way for similar events in the near future. We also entertain the hope that the Legal Subcommittee will put the theme of space debris on its agenda even though the Scientific and Technical Subcommittee may still have work to do regarding the technical implications of the subject, which could benefit from simultaneous discussions in both Subcommittees.

During the present session this Committee will also have to examine matters related to the possible holding of a third United Nations Conference on the Exploration and

Peaceful Uses of Outer Space (UNISPACE). We trust that our present discussions on the theme will benefit from the efforts made by the informal, open-ended drafting group set up by the Working Group of the Whole of the Scientific and Technical Subcommittee. Delegations should therefore be in a position to address in a more focused way the agenda for such a conference, with a view to finalizing our discussions by the next session of the Scientific and Technical Subcommittee.

Such an important conference should enjoy the support of all those concerned — developing and developed countries alike. It should be seen not as an end in itself but as a window of opportunity for identifying concrete steps aimed at enhancing international cooperation in the peaceful use of outer space. We are prepared to work with that broader objective in mind.

Ms. Arrigo (Italy): This is the first time I have attended a plenary meeting of the Committee on the Peaceful Uses of Outer Space. I should like to express the satisfaction of the Italian delegation at seeing you, Mr. Chairman, once again leading the work of this forum, and I take the opportunity to thank all the delegations that are cooperating and participating in the development of activities in outer space.

In accordance with paragraph 37 of General Assembly resolution 48/39, my delegation affirms the necessity to promote and strengthen the development of all ways and means of maintaining outer space for peaceful purposes. To this end, it is important to recognize that this Committee's activities have been in line with its mandate and its primary vocation, independent of other United Nations bodies.

At the same time, it is important to focus on the need for continued progress in the right direction, avoiding confusion with other roles and goals that would be inappropriate.

It gives me great pleasure to note the intensity of the proceedings of the Scientific and Technical Subcommittee at its last session, in February, and to welcome the progress achieved by the Subcommittee.

I should like in particular to focus on the debate on the item concerning space debris, which ended with consensus on the multi-year plan. In this regard, I wish to inform the Committee that a coordinating working group of the Italian Space Agency has started work having scientific and legal competence in the question of space debris.

With regard to the item on the space applications programme, the Italian delegation appreciates the detailed report prepared by the expert of the Office for Outer Space Affairs.

We have listened with great attention to those delegations whose countries have offered to host regional centres for space science and technology education. We take this opportunity to appeal for the future establishment of a centre in one of the Central and Eastern European countries with which the Italian Government has concluded a number of scientific and technological cooperation agreements, and with some of which the Italian Space Agency is collaborating towards achieving the goal of the CESAR scientific mission.

We are also following with great attention the development of negotiations in the African region and, in particular, appreciate the hospitality offered by Morocco.

As the Committee knows, my Government is very interested in the social, economic and environmental development of the Mediterranean basin. Moreover, in southern Italy — in Matera — we have the Space Geodesy Centre, where the Italian Processing and Archiving Facility is located. The archiving, retrieval, processing and distribution of data from the ERS-1 and ERS-2 satellites are accessible to all interested users, and cover the Mediterranean and north African area.

We hope that the new perspectives of this regional cooperation will be taken into consideration, as well as Italy's interest and experience.

As the representative of the Italian Space Agency, I should like briefly to describe the position of Italy with regard to the organization of a third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE).

The debate on this item during the last session of the Scientific and Technical Subcommittee was very intensive. It was not easy to establish some common principles regarding the Conference. My delegation is among those who believe that the opportunity is still there to implement the recommendations of the Second United Nations Conference and that the organization of a third UNISPACE Conference is inopportune.

We are conscious of the geopolitical, social and economic changes and developments of the last 13 years. International space cooperation has increased and expanded

thanks to the efforts of our Committee and also under the auspices of the United Nations. Many countries have appeared on the international space scene. The Italian space system itself has changed. For example, in 1982 the Italian Space Agency was not yet born.

Nevertheless, during the most recent session of the Subcommittee, in February, the Italian delegation appreciated the flexibility shown by some delegations and the spirit of compromise which made possible the intensification of the general debate on a possible third Conference and the establishment of an ad hoc drafting group. I would also like to thank the Secretariat for providing us with a first-discussion document on this subject.

Let me make some remarks on this point. The causes of our perplexity are linked to economic and political questions. Space activities in Europe are at a difficult moment. The economic crisis has affected ESA space programmes; an example of this is the achievement of the agreement on the International Space Station Programme, in which Russia has been invited to cooperate.

In Europe, the countries involved in space must take into consideration the Maastricht Treaty; the European Union is developing and extending its powers. Two meetings next autumn will be decisive in this context: the European Conference at the ministry level of ESA member States in Toulouse, and the European Conference on space policy sponsored by the European Parliament and the European Commission Community in Brussels. These and other considerations are pushing us to concentrate great attention on future space developments before making commitments and to compare our efforts at international cooperation on an equal basis.

My delegation is firmly convinced that only international cooperation can speed progress in space activities in the future. We also believe that every effort should be made to ensure that all countries have access to the benefits of space activities. At present, we ask for a moment of additional reflection to better understand our space capacities, our goals and international space needs, in the interests of all mankind. We are willing to consider every proposal, every tool and every way capable of promoting global economic, social and environmental development arising from space activities.

Mr. Böck (Austria): At the outset, the Austrian delegation would like to thank you, Sir, for your highly instructive and extensive statement on events which have taken place in the peaceful uses of outer space during the past year. We could see that it has been another extremely active year in space, a year characterized by increasing cooperation among countries and the rising number of States engaged in space activities.

Let me now comment briefly on diverse Austrian space activities, which are mainly focused in the following areas: space sciences, with special emphasis on solar-terrestrial relations; planetary exploration and space plasma physics; observation and monitoring of the Earth and its environment; and satellite telecommunications.

The funding for all Austrian space activities — amounting to approximately $50 million per year — is provided by the Federal Ministry of Science, Research and Arts, which is also responsible for the coordination of all space projects, assisted in this task by the Austrian Space Agency (ASA). Austria is dependent on bilateral and international cooperation to participate efficiently in the various areas of space research and its applications. Therefore, Austria has joined the European space institutions ESA, EUTELSAT and EUMETSAT.

In addition, Austria is also engaged in bilateral space activities, mainly with the Russian Federation. This is particularly true for planetary explorations, where Austrian scientists, having already gained valuable experience through their scientific experiments on several Russian space probes, are now preparing instruments for Mars 96. Bilateral activities with the Russian Federation also include extensive cooperation on life-sciences experiments undertaken on the MIR station as a follow-up to the successful AUSTROMIR-91 mission. Several Austrian medical instruments were employed during the long-duration flight of cosmonaut Valeri Polyakov, which was completed after 439 days in orbit on 21 March this year.

The Space Research Institute of the Austrian Academy of Sciences, in Graz, plays a major role in the exploration of outer space and space geodesy. The analysis of satellite data for Earth and environmental observations is being carried out by several Austrian institutions.

The year 1995 is of particular significance because of Austria's involvement in space missions of the European Space Agency. Four major projects are scheduled for launch during this year: the second ESA remote-sensing satellite ERS-2; the infrared observatory ISO, to be launched by an Ariane 4 rocket from Kourou at the end of September-beginning of October; the solar observatory

SOHO, scheduled to be placed into orbit by an Atlas II launcher from Cape Canaveral on 30 October; and the four CLUSTER satellites for the investigation of the Earth's magnetosphere and the interplanetary medium to be launched by the first Ariane 5 rocket in November-December this year.

Austrian scientists are involved in all these projects, and several Austrian industrial companies have contributed to the design, engineering and manufacturing work of these satellites and the Ariane 5 launcher. Austria has always been very active in promoting space cooperation between industrialized and developing countries, both through its engagement in the relevant committees of the Committee on Space Research (COSPAR) and the International Astronautical Federation (IAF) as well as through special initiatives. A recent example of such an initiative is the Mercure project, for which several European countries, including Austria, are designing and installing the pilot infrastructure for a communications system for environmental data transmission, which should later be operated by the United Nations Environment Programme. Mercure will ensure the rapid electronic transportation of large digital data sets containing, *inter alia*, environmental satellite images needed to assess global environmental conditions and the extent of environmental events and disasters.

Austria is also continuing its efforts to organize international meetings bringing together space experts from industrialized and developing countries alike. Let me mention two events in this context that may be of particular interest to the delegations in this Committee.

The Austrian Space Agency, in close cooperation with the United Nations Office for Outer Space Affairs, is again coordinating the preparatory work for the COSPAR/IAF Symposium on the "Utilization of Micro- and Small Satellites for the Expansion of Low-Cost Activities, taking into account the Special Needs of Developing Countries", to be held during the next session of the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space, in February 1996.

Thanks to the financial support of the Austrian Ministry for Science, Research and Arts, the summer courses of the International Space University (ISU) will for the first time be held in Vienna, at the Technical University, in 1996. This event forms part of the so-called millennium anniversary celebrations in Austria. These summer courses of the International Space University assemble about 130 participants from all over the world for 10 weeks of space studies and the elaboration of design projects. We sincerely hope that the delegations present here can promote this unique encounter and encourage bright students from their respective countries to participate in these forward-looking courses in science and engineering, law, business and other space-related fields.

A comprehensive description of Austrian space research is contained in the Austrian report on space activities, in document A/AC.105/592. Furthermore, a brochure on Austrian space technologies, including the activities of industrial companies, is available for all delegations.

In our view, the United Nations Programme on Space Applications could play a primary role in the promotion of the use of space technology for environmental and developmental purposes. It therefore seems all the more important to provide the Programme with additional financial resources. Austria has been one of the few countries that have regularly contributed to the Programme, and we intend to continue our support. I am therefore glad to be able to announce that my country's contribution for 1995 totals $20,000, and we would like to call on other States to follow suit so as to enable the United Nations Programme on Space Applications to cope with the numerous tasks ahead.

In our view, the application of space technology can effectively deal with the problems of illiteracy, isolation and lack of information afflicting the development process. The United Nations Office for Outer Space Affairs, through the Programme on Space Applications, has organized a number of regional and international conferences, workshops and symposiums on various aspects of the application of space science and technology, especially for the benefit of developing countries.

In 1994 Austria sponsored a very successful United Nations symposium, called "Enhancing Social, Economic and Environmental Security through Space Technology", in Graz. In the wake of that success, a follow-up symposium will be organized in Graz from 11 to 14 September of this year, entitled "Space Technology for Improving Life on Earth". This symposium, jointly sponsored by the Federal Ministry for Foreign Affairs, the City of Graz, the State of Styria, the European Space Agency and the United Nations, is mainly devoted to participants from developing countries.

The main objective of the forthcoming symposium in Graz is to promote the use of space technology to improve living and economic conditions, particularly in developing

countries. Through presentations and panel discussions, participants will address the subject of how remote sensing and satellite communications can provide accurate and timely information, which is essential for policy formulation and effective decision-making. Presentations will cover case-study and pilot-project illustrations on the use of satellite technology to enhance food security, communications infrastructure, health and education and early-disaster-warning systems. International and national institutions that are actively involved in space activities will be invited to present an overview of programmes and specific applications so that cooperative activities with institutions from developing countries can develop. Institutions from developing countries will identify areas where their countries are or could be utilizing space technology to assist in formulating policy or implementing management decisions concerning, among other things, the sustainable exploitation of natural resources and the preservation of the environment.

Finally, let me turn briefly to the subject of a third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III).

As my delegation pointed out in the Scientific and Technical Subcommittee, the changed international political situation, advances in space technology and in its applications and increased awareness of their potential terrestrial benefits; the recognition of the special role that space technology can play in areas of universal concern, such as environment and disaster warning, mitigation and relief; and the potential role of space technology in enhancing international peace and security could provide the basis for our Committee to develop a set of sharply focused objectives for a third United Nations Conference on the Exploration and Peaceful Uses of Outer Space. Such a conference should be based on the results and the evaluation of UNISPACE II, which was hosted by the Government of Austria in Vienna in 1982. Main items to be discussed during UNISPACE III could include the current state of space science, technology and research; international cooperation in the areas of earth observation, environmental monitoring and telecommunications; and the development of joint projects and the establishment of local training and research facilities, especially in the developing countries.

If such a conference comes into being, participation should be open to all Member States, as well as to relevant intergovernmental and non-governmental organizations, which would participate as observers. The Office for Outer Space Affairs could serve as the substantive secretariat of a third UNISPACE and provide the executive secretary of the conference.

My delegation welcomed the extensive discussions and deliberations of the informal and open-ended drafting group, under the chairmanship of Mr. Richard Tremayne-Smith of the United Kingdom, during this year's session of the Scientific and Technical Subcommittee. In our view, the indicative agenda, included as an appendix to the scientific and technical report, provides a valuable framework for further action. We look forward to further discussions on this topic during this session of the Committee on the Peaceful Uses of Outer Space (COPUOS) so that the relevant aspects of a UNISPACE III can be considered and a comprehensive and consensus-oriented concept regarding such a conference can emerge.

Mr. Kon Lee (Republic of Korea): On behalf of my delegation, I wish to extend my appreciation to you, Sir, for again chairing this session of the Committee on the Peaceful Uses of Outer Space. I am confident that under your able leadership this session will be guided to a fruitful conclusion.

As this is the first time that my delegation has spoken in this Committee as a representative of a Member State, I would like to take this opportunity to thank the members of the Committee for their positive support of my Government. I also wish to express appreciation for the words of welcome extended through your fine statement yesterday to newcomers to the Committee.

The recent political changes in the international environment have opened a new era of cooperative partnership between Member States in the field of space-related activities. At the same time, the rapid advances in space science and technology have broadened the scope for their practical application for the benefit of all countries. The Committee is now in a better position to focus its energy on promoting the exploration of outer space for peaceful purposes and on ensuring that the benefits derived from it accrue to all States.

As the Republic of Korea has just begun to undertake space activities with the launching of a telecommunications broadcasting satellite, we are exploring what we can contribute to the work of the Committee.

Having participated in the session of the two Subcommittees preceding this session of the Committee, my delegation would like to make some general comments on

several issues that will continue to be crucial in the years ahead.

First, a third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) should be convened before the end of this century at the latest, with the basic objective of assessing the new dimensions brought about by the recent political changes and technical advances and of devising more effective ways and means of utilizing space science and technology for development as we approach the twenty-first century.

In this respect, the report of the Working Group of the Whole provides a framework for future discussions by the Committee since it encompasses the views and ideas of Member States on this issue. My delegation hopes that the Committee will arrive at an early and positive conclusion on the holding of a third UNISPACE Conference in a constructive and timely manner.

Secondly, I should like to stress the importance of the issue of space debris and its consequence for the Earth and the outer space environment. Aware of the potentially hazardous impact of space debris on space activities, my delegation welcomes the multiyear work plan adopted by the Scientific and Technical Subcommittee. The work plan will give structure to our future discussions and thus help us to make speedy progress on this item. We also share the view that the question of space debris is only a part of the much more general problem of the protection and preservation of the outer-space environment.

Thirdly, the advent of an information society necessarily requires further efforts on the part of the international community to regulate and manage both ongoing and future space activities by establishing an appropriate legal framework. In this context, we should address the issue of the definition and delimitation of outer space and the utilization of the geostationary orbit in a more forward-looking manner.

My delegation is also of the view that the Committee on the Peaceful Uses of Outer Space and its Legal Subcommittee are the very forums in which various aspects of the use of the geostationary orbit can be dealt with, maintaining complementarity with the activities of the International Telecommunication Union (ITU).

Fourthly, international cooperation in the peaceful uses of outer space should be further strengthened to encourage the sharing of space resources and technology. In this regard, my Government strongly supports a more active United Nations role in this field and believes that various national, regional and international programmes to promote international space activities should be developed within the framework of the Organization.

Allow me now briefly to introduce some of my country's significant space activities. This year, Korea will launch its first communications and broadcasting satellite, KOREASAT, on 3 August. This satellite will provide fixed satellite service and digital direct broadcasting service to customers in Korea. My Government expects the KOREASAT project to generate new momentum in the future of Korean space activities.

Other space programmes include the Korean Aerospace Institute's Korea Multi-Purpose Satellite (KOMSAT) system project. KOMSAT is scheduled to be launched in 1999. The main operational mission of KOMSAT will be to provide various applications in Earth observation and mobile communications experiments.

We are acutely aware of the vast technological horizon of space activities and their potential role in advancing economic and social development. As a result, the Korean Government is now formulating a long-term comprehensive national space programme that will be based on an assessment of our national development priorities, technical capabilities and financial resources.

Lastly, I am pleased to inform this Committee that the Asia-Pacific Satellite Communication Council (APSCC) was established in Seoul last October. As the fastest-growing region of the world, the Asia-Pacific region is now witnessing an explosion of demand for satellite communications and broadcasting. In this regard, we believe that the APSCC will serve as a valuable regional forum to promote regional exchanges and cooperation in this field. I should also like to take this opportunity to thank the Office for Outer Space Affairs for its support and technical advice in creating this organization.

In conclusion, let me reiterate my delegation's full commitment to working with you, Mr. Chairman, and with all other Member States in making this session a successful one.

Mr. Suárez Amezcua (Mexico) (*interpretation from Spanish*): The delegation of Mexico is pleased to see you once again, Mr. Chairman, guiding the discussions at this session. Your well-known diplomatic skills and your broad knowledge of the subjects on our agenda give us hope that, under your skilful guidance, we will have interesting

discussions and useful exchanges of views on the subjects that are of interest to us.

During our previous sessions, we have noted that it has become almost obligatory to refer frequently in the statements of most delegations to the concept of international cooperation. The explanation is that international cooperation is a priority component of major importance on the international agenda of many States and one of the objectives promoted by our Committee.

Along these lines, my delegation wishes to emphasize the great importance the Mexican Government attaches to the promotion of international cooperation by States that have significant capacities in the field of space, bearing in mind the aim of encouraging the proper application of the recommendations adopted at the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE 82).

Accordingly, my delegation believes that this is an ideal opportunity to reiterate the Mexican authorities' support for the convening of a third UNISPACE, taking account of the guidelines contained in paragraphs 25 to 29 of General Assembly resolution 49/34, dated 9 December 1994. This could provide an impetus to reflect on the ways to promote efforts for cooperation in outer space.

Another aspect which has aroused the Mexican delegation's attention and which is intimately linked to the concept of international cooperation within our Committee is the establishment of regional space-science and technology education centres.

In this connection, my delegation views this session as a good opportunity for us to demonstrate once again the Mexican Government's determination and willingness to see the negotiations lead as soon as possible and in the most convenient form to the establishment of the regional Centre for Latin America and the Caribbean. In order to obtain that objective, which is of immediate interest to the region, we believe that it would be appropriate to confirm the commitment of the United Nations, through its Office for Outer Space Affairs, to lending decisive support to the various plans for the establishment of regional centres of this sort.

Another item which continues to be of interest to our Committee relates to the use of nuclear power sources in outer space. Recognizing the importance and significance of this subject, my delegation agrees that more extensive and up-to-date information on it is necessary if we are to begin work to cover possible gaps or imprecisions in the principles adopted by the General Assembly in this regard. In conformity with this proposal, the Mexican delegation believes that it would be a good idea to ask the Scientific and Technical Subcommittee to provide the information to which I have referred and, if necessary, to convene the Working Group of the Legal Subcommittee to pursue its task of identifying gaps in the aforementioned principles.

On a previous occasion, my country's delegation referred to the importance of having a legal regime to avoid the proliferation of space debris, and to the need to make clear that the five legal instruments on outer space are universal. On the assumption that such work could be useful not only to the States members of COPUOS but also to other members of the international community, the scientific and academic sectors and all those interested in the subject, my delegation reiterates the proposal that a preliminary document be drafted that would include the opinions of interested delegations, which would make it possible subsequently to establish a sufficient basis to initiate a reliable analysis of the status of this issue.

Finally, I wish to refer to another matter that has captured our attention during recent discussions: the content of the agenda and the duration of sessions. In this connection, my country would tend to favour those suggestions and ideas calling for the full utilization of our sessions. We agree with all the delegations that have proposed that pragmatic and up-to-date agendas be drawn up, allowing the subjects to be addressed effectively, appropriately and in depth.

Mr. Marchán (Ecuador) (*interpretation from Spanish*): Having recently arrived in Vienna as Ambassador and Permanent Representative, it is a source of great satisfaction for me to participate for the first time in a session of this Committee. Given my longstanding academic connection to the subject of space, I have always followed with great interest, though at a great distance, the items debated in this forum.

You, Mr. Chairman, can count on my personal cooperation and that of my delegation in the work on the important items we shall be addressing during our deliberations over the next two weeks. I am also certain that your well-known skill and experience will ensure us a very successful session. I should also like to congratulate the new Vice-Chairman of the Committee, Ambassador Dumitru Mazilu of Romania, on his election.

I am very familiar with the distinguished work of Mr. Jasentuliyana, as both the author of works on outer space and the Director of the Office for Outer Space Affairs. I had the opportunity to meet with him last in Santiago, when I had the honour of holding a vice-chairmanship at the Second Space Conference of the Americas. I am convinced that his great knowledge of the subject, as well as the support which his staff will provide to this Committee, will allow us to make progress on items which require not only our study and analysis, but also our decisions.

I take this opportunity to welcome the new members of COPUOS. My delegation has noted that their participation in the Scientific and Technical and Legal Subcommittees has already enriched the debate and given new impetus to the discussions.

The statement made yesterday by the Chairman at the opening of the session was a very important one. He brilliantly summarized some of the Committee's achievements over the past year as well as the major challenges which we continue to face. Nevertheless, as he rightly pointed out, these can be positively resolved through international cooperation as the guiding force of States' space activities. It is well known that the essential foundation of space cooperation lies, on the one hand, in the fact that no undertaking as vast as outer space can be addressed exclusively by one group of States and, on the other, in the fact that the global benefits of space cooperation can be provided in a broader and more effective manner, which is to the advantage of all the nations of the Earth. Moreover, in addressing the issue of space cooperation, we are bound by a legal rule clearly established in article IX of the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies. It states that:

> "In the exploration and use of outer space, including the Moon and other celestial bodies, States Parties to the Treaty shall be guided by the principle of co-operation and mutual assistance..." (*General Assembly resolution 2222 (XXI)*)

My delegation has taken an active part in the discussions of the Committee's subsidiary bodies this year. The serious and intelligent treatment of the assigned subjects has allowed us to make progress on various issues. We are of the view that the great progress made to date should be deepened and consolidated in the context of this Committee's work.

I wish to refer to certain subjects in greater detail.

As I have pointed out, my delegation attaches particular importance to international cooperation, which is absolutely vital if all countries of the Earth, and the developing countries in particular, are to benefit from the knowledge acquired. Given the scope of space exploration, there can be no doubt whatsoever that this is a matter affecting mankind. Carrying out the task of exploration with new technological tools without making those tools available to other nations would be a moral error that would hamper expansion at all levels of the frontiers of human knowledge.

Thus, as one author has said, cooperation on this scale between all nations can be achieved only

> "when all parties feel sure that the contributions of every single one of them will be adjusted to its capacity, when the results of the effort can be freely exchanged between all of them, and when all share the benefits."

The strengthening of our countries' indigenous capacities, access to sources of financing, the implementation of programmes and projects with real impact and, *inter alia*, access to materials, technology and information can be ensured only through broad and efficient international cooperation, and this is an urgent necessity.

At past sessions my delegation noted its concern about the increase in space debris, particularly in the geostationary orbit. My delegation has also noted that many other delegations share this concern and that a growing number want this matter to be studied by the Legal Subcommittee in the near future. Space debris in the geostationary orbit — a limited natural resource, which is in danger of saturation — can threaten space navigation, telecommunications, future access and the very security of States. Consequently, we cannot ignore this subject.

With regard to the geostationary orbit itself, my delegation believes that a *sui generis* legal regime must be established in that orbit that takes account of its physical properties and technical attributes and safeguards the right of access that numerous countries may not yet have exercised. This would provide a framework of reference to guarantee that the utilization of that orbit by all nations of the planet could be ensured independently of their level of economic, scientific or technical development.

In the working out of a regime of this sort, account must be taken, on a basis of universality and equity, of, among other things, the interests and requirements of all countries, whether current or future users, as well as the geographic situation of certain countries. In the debate on the relevant agenda item I shall refer to this subject in greater detail.

My delegation has since the outset supported, and wishes to reiterate that it supports, the convening of a third United Nations Conference on the Exploration and Peaceful Uses of Outer Space — a UNISPACE III. We hope that at this session it will be possible to make more progress towards consolidating and defining the subjects relating to the convening of such a Conference. The impetus that it would give to international cooperation, as well as to various space subjects, would result in deeper consideration of all the matters that are of concern to us.

I take this opportunity also to reiterate Ecuador's interest in the establishment of a regional centre for space science and technology training for Latin America, with headquarters in Mexico and Brazil. There is no doubt that our entire region would benefit directly from such a centre.

My delegation notes with satisfaction that the Legal Subcommittee approved the questionnaire on aerospace objects. This Committee will have to endorse that questionnaire so that it can be distributed among all States.

Finally, I should like to refer briefly to our methods of work. In this connection, I think we should maintain the greatest possible flexibility in the procedures of the Committee and its subsidiary bodies. Of course my delegation attaches special importance to consensus, which has been a very useful instrument enabling the Committee on the Peaceful Uses of Outer Space to achieve important agreements of various sorts, some of which were certainly difficult and complex. It is true that the methods of work of any body that has to consider matters and take decisions can and must be improved, but it is not necessary to undermine in any way the consideration that we must give to the substantive issues that we wish to study and analyse.

In conclusion, I am pleased to repeat my delegation's support for you, Mr. Chairman, for the other officers of the Committee and for the delegations represented here, in the efforts to ensure that we make real progress on the subjects that we have to address in the context of our agenda.

Mr. Perek (Czech Republic): Once again, Sir, we meet under your chairmanship, in anticipation of a fruitful session. We are ready to contribute to achieving that aim.

This year we meet with an enlarged membership. It is our expectation that the presence of new members will add to the experience and expertise of the Committee.

An important period in the history of the Scientific and Technical Subcommittee came to an end this year. The Chairman of that Subcommittee, Professor John Carver, announced his intention to step down from that post following his completion of 25 years' distinguished service. All of us who had the privilege of working under his guidance highly value his great ability to conduct the Subcommittee's business quietly and effectively and to contribute essentially to the shaping of views — sometimes disagreeing, sometimes clashing — towards a common base and to finding a compromise acceptable to all. We wish Professor Carver all success in his future work.

Let me turn now to the items on the agendas of the Subcommittees. We appreciate the work being done by the Office for Outer Space Affairs in the domain of the Space Applications Programme — in particular, the very rich programme of workshops, courses and meetings on the whole spectrum of space applications and the coordination of fellowships and of technical advisory services. It is gratifying to note the very wide cooperation of the United Nations specialized agencies and of non-governmental organizations in implementing the recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE 82). All these efforts are capably coordinated by the Office for Outer Space Affairs.

As regards remote sensing of the Earth, one of the important points is access to remote sensing data and analysed information. Perhaps more attention should be paid to new ways of disseminating data by computer networks. We feel that knowledge of these relatively new channels of information flow is still restricted to specialists in computer technology and that not enough is known elsewhere. We therefore propose that the Secretariat prepare a study on accessibility of remote-sensing information through computer networks in order to show how quick, inexpensive and comprehensive these channels could be. The study should also show what technical equipment is necessary to benefit from this technical development.

In this context, we welcome the information provided by Mr. Jasentuliyana in his statement that a Home Page for the Office for Outer Space Affairs in the computer network INTERNET is in preparation. We anticipate that the Home Page will contain also the United Nations Register of Objects Launched into Outer Space and references to other important sources of data, such as the orbital elements and various lists of satellites.

The results of the study on the accessibility of remote-sensing data, which we have just proposed, could also form part of the Home Page.

The Scientific and Technical Subcommittee has recommended that the question of the use of nuclear power sources in outer space be retained on the agenda, and rightly so. It will have to be followed with attention in the future because this is an important way of supplying energy to space probes. In one aspect, this item overlaps with the item on space debris, namely in the question of safety of orbiting space objects with nuclear power sources on board. In particular, it concerns collisions with space debris and a proper choice of the altitudes of disposal orbits. It would be logical to continue consideration of these aspects under the more general item on space debris, while keeping in mind the special relevance of safety of nuclear power sources.

The item on the geostationary orbit is under discussion in both Subcommittees. The Scientific and Technical Subcommittee should take into account the recent definition of the geostationary orbit used by the International Telecommunication Union (ITU). It may affect the concept of a satellite which appears fixed over a point on the surface of the Earth.

The discussion of the geostationary orbit in the Legal Subcommittee showed little progress last year, as in the several preceding years. We see the reason for this in, *inter alia*, the unfortunate combination of the item on the geostationary orbit with the item on the definition of outer space. As we and other delegations stated last year, the two items have nothing in common in the scientific domain. In the political domain they had something in common in the past, but, judging from recent statements, the common ground belongs to history; we should be concerned with the present and future situation and leave history to historians. We should keep in mind that the International Telecommunication Union adopted a recommendation — non-binding, but nevertheless important — dealing with a definition of the geostationary orbit and with the reorbiting of satellites to disposal orbits situated beyond the geostationary orbit.

The item on space debris is, in our opinion, the most important item on the agenda of this Committee and that of its Scientific and Technical Subcommittee. It has not yet been put on the agenda of the Legal Subcommittee because more discussions of scientific and technical aspects are still necessary before any legal norms are considered. On the other hand, the Legal Subcommittee will need considerable time to develop the basis for a substantive discussion. This was the opinion in the Legal Subcommittee when it considered possible new agenda items. A proposal was put forward, *inter alia*, to include an item on the evaluation of valid norms of international law applicable to space debris and another item on legal aspects of space debris. Our delegation proposed merging these two items into a single item under a suitable title. A discussion of this item — perhaps not a very formal one, but, rather, in a manner resembling scientific symposium — would show the spectrum of opinions on these matters and would prepare the ground for a possible substantive discussion in the future.

An important step was taken in the Scientific and Technical Subcommittee with the formulation of the work plan for the years 1996 to 1998. Since the plan was declared to be flexible, we might consider a few additions to it, such as the consideration of debris in the geostationary orbit. The details will be presented later.

We support the idea expressed yesterday by the representative of Poland, Ambassador Wyzner. We agree that the question of space debris is part of a more general problem of protecting and preserving the outer space environment. However, our task is even more complex. We have to keep outer space open for peaceful, reasonable and beneficial activities. In other words, we have to introduce efficient and sustainable management of outer space. This we perceive as the role of our Committee for the future.

As regards the proposal for holding a third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE), we appreciate the work done by the Working Group during the session of the Scientific and Technical Subcommittee. We feel that there is one more very important reason to hold the Conference: the idea of the information superhighway, technically developed in the world-wide web, or INTERNET networks. The networks represent a radical change in accessing information which will affect all fields working with data sets or needing information from various sources. The new channels of information are very fast, require relatively inexpensive equipment, can be accessed even in remote parts of the world and are related to all space applications

and practically all scientific research. All topics dealt with at a third UNISPACE will have to be considered from the point of view of the interaction between space activities and the information superhighway. This idea should be developed in the justification for a third UNISPACE.

Some items on our agenda, such as those on space transportation and matters relating to life sciences, to planetary exploration and to astronomy, are not likely to require specific regulation. Nevertheless, we attach importance to these items because this Committee has to have before it updated information on all important developments in outer space activities.

We shall make more detailed statements on some of the foregoing points in due time.

Ms. Hasan (Pakistan): At the outset, I would like to state that it is a pleasure for my delegation to attend this session of the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) once again with you, Sir, as its Chairman. We are confident that under your skilful guidance the Committee will, as it has in the past, succeed in satisfactorily completing the tasks before it.

I would also like to take the opportunity to congratulate Ambassador Mazilu of Romania on his election as Vice-Chairman and to join the other delegations in welcoming the new members of COPUOS.

My delegation would further like to place on record its appreciation of the valuable assistance rendered to the Committee by its Subcommittees, working under Professor John Carver of Australia and Mr. Václav Mikulka, persons of eminence. My delegation hopes that the Committee and the two Subcommittees will continue to be headed by persons with the same qualities so that these bodies can continue to make progress in their work in the face of the ever-growing complexities of issues arising on account of technical and political considerations.

Professor John Carver of Australia announced at the thirty-second session of the Scientific and Technical Subcommittee that he would be retiring after that session. He has served with distinction as Chairman of the Subcommittee for 25 years and has made a lasting and valuable contribution to the promotion of international cooperation in the peaceful uses of outer space.

Pakistan's space programme, executed by SUPARCO, the national space agency, continues to make modest progress in the peaceful applications of space technology. The developmental work on Pakistan's second experimental satellite, BADR-B, has registered further progress, and operational testing of various subsystems of the spacecraft has been undertaken satisfactorily.

Pakistan's Satellite Ground Station at Islamabad continues to acquire Landsat MSS/TM, SPOT HRV multispectral/panchromatic and NOAA AVHRR HRPT data. The station continues to provide high-quality Landsat and SPOT data to user organizations in Pakistan and abroad. A number of thematic studies were completed by using the satellite remote sensing data coming through this station.

SUPARCO's Satellite Aided Search and Rescue Facility, comprising the Pakistan Local User Terminal and Mission Control Centre, to locate aircraft, ships, and land mobiles in distress within a 5,000-kilometre area has been operating successfully. Distress signals were received and processed, and information has been supplied to related user agencies on a regular basis.

Pakistan is one of the three original signatories of the Memorandum of Understanding of 1992, which brought into being the framework of multilateral cooperation in space technology and applications among the Asia-Pacific countries for the benefit of the region. The other two sponsoring countries, China and Thailand, had already hosted a workshop and conference within this framework in 1992 and 1994, respectively. The third event in this series was hosted by Pakistan, in cooperation with China, the Republic of Korea and Thailand, at Islamabad in April 1995; 111 delegates from 12 countries and representatives from four international organizations participated.

The Ministerial Conference on Space Applications for Development in Asia and the Pacific Region was held in Beijing in September 1994; it was preceded by the Preparatory Meeting of senior officials. Pakistan, among other countries, also participated in the Conference and made a significant contribution, both in the Preparatory Committee meeting and in the Conference proceedings. The purpose of the Conference was to launch a regional space applications programme for development in Asia and the Pacific. The main outcome of the Ministerial Conference was the Ministerial Declaration, adequately reflecting the need to promote national capability-building in the countries of Asia and the Pacific to make increasing use of space technologies and addressing the urgent problems confronting them.

In conclusion, I should like to say that my delegation will continue to support all efforts directed towards furthering the progress of the work of this body and will contribute as effectively as possible to the consideration of the various agenda items at the current session. I should also like to reiterate my delegation's appreciation of the efforts put into the functioning of this Committee by you, Mr. Chairman, and the officers of the Committee.

Mr. Porojan (Romania): It is my pleasure to extend to you, on behalf of my delegation, our appreciation for your service once again as Chairman of this Committee. We are confident that, with the proven experience and dedication of the Committee and your clear leadership, all our deliberations will be successful. Like other delegations, the Romanian delegation assures you of full cooperation.

Our delegation also welcomes the election as Vice-President of His Excellency Ambassador Dumitru Mazilu, a well-known Romanian specialist in international legal affairs. I should like also to express the Romanian delegation's appreciation to the host country for its well-known hospitality. And, last but not least, I should like to convey the Romanian delegation's gratitude for the meaningful contributions of the secretariat in preparing the instruments and the documents before the Committee, and also to thank our two Subcommittees for their very hard work.

Since the Committee's last session, major changes have taken place in the world, many of which have had a direct impact on space activities. The Romanian delegation welcomes the progress made during the Subcommittees' thirty-second and thirty-fourth sessions, respectively, especially on the proposed principles regarding international cooperation in the exploration and utilization of outer space for peaceful purposes. Good work has also been done in discussions on the legal aspects related to the application of the principle that the exploration and utilization of outer space should be carried out for the benefit and in the interests of all States, taking into particular account the needs of developing countries.

Romania's national space programmes reflect its efforts to pursue a policy of peace and ensure the demilitarization of outer space. As noted by my delegation during the session of the Legal Subcommittee, we consider that the Principles Relevant to the Use of Nuclear Power Sources in Outer Space, adopted by the General Assembly in resolution 47/68, should be strengthened, first through efforts by the Scientific and Technical Subcommittee to create a better framework for the use of nuclear power sources, and secondly through efforts by the Legal Subcommittee to develop legal norms.

Our delegation considers the definition and delimitation of outer space to be necessary because of the different legal regimes that should cover space and outer space, respectively. Delimitation should be based on the deliberations and conclusions of the Scientific and Technical Subcommittee.

We wish to reaffirm our view that the geostationary orbit is a limited resource and that all countries should have free access to it, including those that do not yet have the capacity to launch satellites. The interests of such countries should be safeguarded by ensuring that the legal principles adopted take into account their possible future technological development. In that connection, the suggestion by the Brazilian delegation that a seminar be held on the possible legal implications of the existence of space debris in the geostationary orbit was of great interest.

We must recall our great interest in the fact that States that have already developed space capabilities appear to be willing to cooperate with other countries. We note that the Russian Federation has already indicated its readiness to cooperate with the countries of Eastern Europe.

As members know, in 1993 the Romanian Space Agency signed the Agreement on Space Cooperation for Peaceful Purposes with the European Space Agency. As a result, Romanian institutions received significant scientific and technical assistance.

Romania is currently operating ground-based stations for telecommunications, satellite television, meteorology and navigation. Data transmission will follow shortly. A station for processing remote-sensing data and several laboratories to perform similar tasks have also come into operation.

We must emphasize Romania's long experience in the manufacture of satellite-borne scientific devices, such as magnetometers, field and radiation detectors, computer facilities and telemetering instruments.

We should like to take this opportunity to express once again Romania's firm commitment to the promotion of the peaceful uses of outer space through international cooperation. Despite the difficult economic situation in the country, the Government has managed to maintain its space research and application capabilities, most of which are well known. Ideally, we should find an equitable means of

ensuring that space exploration is a right of all mankind. The Committee on the Peaceful Uses of Outer Space is the forum for consensus and for the definition of international priorities. It is high time to achieve international agreement on imaging system priorities, international partnership, education and training, and the question of encouraging commercial enterprises to develop affordable systems.

The Romanian Government supports the proposals of the United Nations Expert on Space Applications regarding the creation of regional centres for space science and technology education. As was stated last year, Romania is ready to host one such regional centre. At the same time, we consider that the principal donors must continue to support the provision of training opportunities for scientists from developing countries.

It is necessary, with the cooperation and support of advanced countries, to organize training courses and to arrange programmes on remote-sensing applications for planning and management of the environment, natural resources and the physical infrastructure in various economic regions, and to stimulate more local participation.

Romania strongly believes that the benefits from space programmes should be shared by a greater number of States and peoples. It is important to use space knowledge for communications development, environmental protection and disaster prevention. Space activities have had a profound impact on people's lives ever since the beginning of the space era, in terms of their ability to improve the quality of life on earth and to take a unified view of human development on our fragile planet.

Romania believes that free access to space-related information, the transfer of technology, the provision of additional technical and scientific educational aids and the dissemination of advantages resulting from space could effectively promote development and help developing countries to resolve their existing differences. Thus, international legal standards in this area should be adopted. Establishing and supporting regional mechanisms within the United Nations framework could greatly influence the achievement of that set of goals.

Mr. Liu Dagun (China) *(interpretation from Chinese)*: At the outset, Sir, please allow me, on behalf of the Chinese delegation, to extend warm congratulations to you on your reappointment as Chairman of the Committee on the Peaceful Uses of Outer Space (COPUOS). We have been inspired by the great progress and achievements since you were first appointed Chairman of this Committee. I hope that, under your leadership and through the joint efforts and cooperation of all delegations, continued smooth progress will be made during the current session in the Committee's deliberations on the various agenda items.

I should also like to extend warm congratulations and a warm welcome to the eight new members of the Committee — Cuba, Peru, Kazakstan, Malaysia, Nicaragua, the Republic of Korea, Senegal and South Africa. We are convinced that the participation of these new members will inject new vitality into the Committee's work.

With the continuous development of space technology, human activities in the exploration and exploitation of outer space are also intensifying and expanding. We are pleased to note that in the past year new achievements have again been registered in the space activities of many countries. International cooperation in space has also made new progress. The United Nations Programme on Space Applications has won the support of the countries and international organizations concerned. Many training courses, symposiums and seminars have been held, and through these a host of technical advisory services have been provided to many countries, particularly the developing ones. All these developments have contributed to the promotion and coordination of space activities and have provided mankind with a sound basis to benefit from human exploration and the peaceful uses of outer space.

Since the last session of the Committee China has recorded new successes in the exploration and peaceful uses of outer space. We made several successful launches, using the Long March series of launching vehicles, including the newly developed Long March-3A. The Chinese Government has consistently supported and actively promoted the implementation of the United Nations Programme on Space Applications. Last September the Ministerial Conference on Space Applications for Development was held in Beijing, and the Workshop on Microwave Remote Sensing Applications was organized at the same time. This is a major activity in the implementation of the relevant recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE 82).

The Chinese Government will continue actively to support and participate in the activities of the Space Applications Programme. This includes our continued offer to the developing countries of two one-year fellowships for training in the area of remote sensing and cartography, as well as satellite geodesy.

Here I should like to mention that in March this year the Governments of China and the United States of America signed a memorandum of agreement concerning matters of international trade relating to commercial launching services. China's cooperation with other countries in the area of outer space has also been strengthened.

On ways and means of maintaining outer space for peaceful purposes, the Committee has done a great deal of work in recent years. The Chinese Government wishes to reiterate that, although the current international situation is moving towards relaxation and the arms race in outer space has subsided, preventing the militarization of outer space remains an issue of concern to the entire international community. The Chinese Government has always actively supported all efforts towards the peaceful uses of outer space and is opposed to the use of space technology for non-peaceful purposes.

We stand for the intensification of international cooperation in the peaceful uses of outer space for the benefit of all mankind, and we attach great importance to the work of formulating international space law within the United Nations system in order to strengthen the space legal order. We believe that the relevant organizations within the United Nations system should maintain sustained and effective consultation and coordination in the area of outer space so as to utilize more effectively the limited resources of the system that are allocated to space activities. The Chinese delegation is prepared to work with all other delegations, through full consultations, in exploring ways and means of maintaining outer space for peaceful purposes.

With respect to agenda items 5 and 6, we have taken note of the reports of the Scientific and Technical Subcommittee and the Legal Subcommittee, and we would like to express our appreciation for the progress made by these two Subcommittees. We will make known our concrete views on these matters in future when these items are discussed. Furthermore, I should like to emphasize the question of establishing a centre for space science and technology education in the Asia and Pacific region. This is an item to which the Chinese delegation attaches great importance. We hope that an appropriate and sound settlement to this question will be reached through consultations and cooperation.

After many years of effort, the Committee on Outer Space has achieved substantial results. The current changes in the international situation are conducive to the establishment of an international legal order for space and to the promotion of international cooperation in the peaceful uses of outer space. We hope that the Committee, through the joint efforts of its Member States, will continue to solve the problems before it and will achieve even greater results.

China, as a developing space Power, has limited capabilities with respect to the exploration and uses of outer space, but the Chinese Government will make an effort to expand space cooperation with other countries and to contribute its fair share to this great cause of humankind — the peaceful uses of outer space.

In conclusion, I wish also to thank the secretariat staff, headed by Mr. Jasentuliyana, whose diligent work laid the foundation for the smooth running of this session.

The Chairman: I now call on the representative of the Association of Space Explorers.

Mr. Prunariu: I am very pleased to address the thirty-eighth session of the United Nations Committee on the Peaceful Uses of Outer Space on behalf of the Association of Space Explorers (ASE), the sole international organization to gather under its auspices over 200 individuals from 26 nations who have flown in space.

Since ASE's establishment in 1985, the very spirit that has consistently motivated its activities has been directed at peace and understanding, at the joining of efforts to promote harmonious views with regard to issues of global concern and at the use of space technology for the benefit of all mankind.

ASE pays special attention to and has a particular interest in the work of the United Nations Committee on the Peaceful Uses of Outer Space.

The members of our Association have made direct contributions to the development of various space programmes. Astronauts carry out their tasks aboard spaceships and are thus constantly subjected to the adverse conditions of the outer space environment and to the major risks implied by such an activity. This is why we salute the special consideration that is being given to space debris as a separate item on the working agenda of the Committee's session. Space debris represents a danger not only for active space facilities but also for the astronauts who carry out on-orbit activities.

Recent developments in the life sciences and their implications for the field of space medicine are another

topic of direct interest to our Association. The concrete use of recent research has a direct influence upon the living conditions, the activities and the health of those who work in outer space.

ASE members share the knowledge gained from their experiences, emphasizing the significance and benefits of space science and exploration. They promote scholastic excellence by supporting educators and motivating students. This past year saw the commemoration of the twenty-fifth anniversary of man's conquest of the Moon, and this jubilee year lent special energy to ASE's educational activities. At every opportunity, ASE members strive to improve public understanding of our endeavour in space and to inspire young people to continue the challenge taken up 34 years ago.

In November 1994, five members of our Association attended the third Forum of the European Organization for the International Space Year (Eurisy), held by Euro Space Camp Belgium. The Forum brought together students and educators from different countries, who enjoyed the opportunity to enrich their knowledge through the direct exchange of ideas and information with the astronauts attending the Forum. In December last year, three astronauts members of our Association attended the inauguration of the Canadian Space Center "Cosmodôme", designed to contribute more efficiently to the education and training of young people.

One of the major issues that ASE has focused on is the environment. Viewing Earth from space has imbued ASE members with a sense of responsibility for the well-being of our world. ASE has been at the forefront among organizations advocating the use of space-based observation platforms to monitor humanity's impact on the global environment, and it supports the timely worldwide dissemination of data gathered by these space resources. Our Association is continuing to participate in an international project to preserve and protect the world's forests.

A prime component of ASE's ongoing partnership with the United Nations is environmental education. ASE chose "Space and Ecology" as the theme of its tenth annual Congress, held in Russia. The 10-day event was devoted to promoting the use of space-based platforms as posts from which to monitor environmental change on Earth. Over and over again, the point was made by ASE members, astronauts and invited guests that space technology has a vital role to play in defending our home planet from ecological damage. Of particular concern to ASE's Russian hosts was the deterioration of the exquisite Lake Baikal ecosystem in Siberia. Upon the Congress's conclusion, the members adopted the tenth ASE Congress general statement in the form of an appeal to Presidents, Heads of State, parliaments, religious and civic leaders, and all the citizens of the world. The text of this appeal reads as follows:

> "Astronauts and cosmonauts from many nations met at their tenth Congress in 1994. Members of the ASE emphasized the need for international cooperation in order to maintain and restore the balance of the Earth's ecology and in order to protect the integrity of global biogeochemical systems. In the spirit of the United Nations Rio de Janeiro Declaration on the Environment and Development, ASE members appeal to Governments and leaders and peoples of the world to undertake the following actions:
>
> "First, to establish a global database to address environmental concerns with compatible formats available to all people.
>
> "Secondly, to develop international standards for the analysis and identification of substances released into the environment, to limit toxic effects. Existing agreements on toxic substances should be reviewed regularly and updated to include newly identified toxic substances.
>
> "Thirdly, to review and consolidate existing environmental agreements, including local residents in the process, and encourage our Governments to adhere to them.
>
> "Fourthly, to identify areas of particular ecological interest, such as Lake Baikal, that require special protection to be maintained for all humanity.
>
> "We, as members of ASE, will promote the protection of the environment by using our photography in public meetings to explain our concerns and listen to the concerns of others.
>
> "Adopted this 15th day of August, 1994."

ASE would be grateful to the secretariat of COPUOS if it were to approve the presentation of this appeal, adopted at its tenth congress, to other United Nations organizations involved in environmental protection and distribute it as an official document of the United Nations.

The Chairman: I call on the representative of the International Law Association.

Mr. Böckstiegel: I should like, first, to express my gratitude and that of the International Law Association (ILA) to you, Sir, for your efficient chairmanship of the Committee and both to you and to the Secretary of the Committee, Mr. Jasentuliyana, for substantial leadership and for the progress in the use of outer space for peaceful purposes.

For the benefit particularly of those representatives and observers who have not attended the sessions of this Committee in recent years, I should like to recall very briefly some basic information regarding the International Law Association.

The ILA was founded as long ago as 1873 and has, ever since, been a non-governmental international organization of academics and practitioners in the field of international law. The ILA has national branches in all parts of the world, and its headquarters in London. Its work is presented and formalized at biannual conferences held in various places world wide. The last conference was held in Buenos Aires, and the next will be held in August 1996 in Helsinki. Between conferences the work is carried out mainly by Committees which are established for the various fields of public and private international law.

One of these Committees is the ILA Space Law Committee, which I have the honour to chair. Its Rapporteur is Professor Williams of Argentina, and its members are distinguished specialists in the field, many of whom are well known to members of the Committee on the Peaceful Uses of Outer Space (COPUOS) and its Legal Subcommittee.

For further information on the ILA and its work regarding space law, reference may be made to the recent United Nations publication "Space Activities of the United Nations and International Organizations" (A/AC.105/521), as well as to the ILA conference reports, which are published in book form after every ILA conference.

As the work of the ILA Space Law Committee in recent years has focused on the protection of the space and earth environment in relation to space activities, and in particular on the issue of space debris, let me first of all note with pleasure and satisfaction the progress that has been made in COPUOS in dealing with these subjects. We heard about some of that progress again this morning. You yourself, Mr. Chairman, took a leadership role in this context when, in your statement at the beginning of the 1993 COPUOS session, you highlighted these issues and concluded

> "that the time has come for this body to fulfil its responsibility to the international community by beginning formal discussions on what steps should be taken to address this growing problem." *(A/AC.105/PV.379, p. 21)*

The ILA could not agree more with that conclusion.

Thereafter, the secretariat issued a further report — "National Research on Space Debris" (A/AC.105/565). But a particular milestone is the fact that, at its session in 1994 the Scientific and Technical Subcommittee for the first time had space debris on its agenda and discussed this topic at considerable length. For good reasons that Subcommittee then, at its session in 1995, dealt with space debris as a priority agenda item and adopted a multi-year plan for its work until 1998. In the context of this multi-year plan, the International Law Association will certainly try to assist in any way it can with the work on this topic.

But we also note that there is still some hesitation in the Legal Subcommittee about having substantial discussions on space debris at an early date. The ILA certainly feels that, at least, information on that agenda item should be exchanged between the two Subcommittees of COPUOS because any discussion in the Legal Subcommittee obviously needs to be based on the scientific and technical information available in the Scientific and Technical Subcommittee. And vice versa: if, at least in the long term, progress should be achieved in this area, the option of an international instrument has to be taken into account at an early stage in the Scientific and Technical Subcommittee, and the specific expertise of the Legal Subcommittee obviously can make a considerable contribution to this.

Let me now briefly present a progress report on the work of the International Law Association in this area. On the basis of a decision at the ILA Conference in Seoul in 1986, the ILA Space Law Committee has been doing research, exchanging information and views and, finally, preparing drafts regarding protection of the environment from damage caused by space activities, particularly space debris. In doing so, the legal experts in the ILA Space Law Committee have had the benefit of support from three scientific consultants — Professor Lubos Perek of the Czech Republic, whom we heard this morning; Professor

Dieter Rex of Germany; and Professor Ricciardi of Argentina.

Landmark events included the following: a regional ILA seminar in Buenos Aires in December 1987; an international colloquium at the Institute of Air And Space Law in Cologne in May 1988, which emphasized interdisciplinary sides of the question and which resulted in a book; discussions and a further mandate at the ILA Conference in Warsaw in August 1988; a meeting in Asunción del Paraguay in October 1988; a report to the 1990 ILA Conference in Australia, which resulted in a mandate to the Space Law Committee to start work on the elaboration of relevant principles; and, after the preparation of three drafts, a report to the 1992 Cairo Conference of the ILA, which resulted in a mandate to prepare a final text of a draft international instrument.

After this long and extensive preparation, three drafts have been prepared, circulated and discussed at various stages since 1992 by the ILA Space Law Committee, and the final text, with the title "International Instrument on the Protection of the Environment from Damage Caused by Space Debris", was submitted, with an extensive commentary by the Rapporteur, to the sixty-sixth Conference of the International Law Association, in Buenos Aires in August 1994. The Conference adopted it by formal resolution, the text of which is enclosed, together with the text of the instrument, with the written version of this statement as distributed at this meeting.

Major provisions in this final text deal with definitions (article 1), scope of application (article 2), the general obligation to cooperate (article 3), obligations to prevent, inform, consult, and negotiate in good faith (article 4), compatibility with other agreements (article 5), responsibility and liability (articles 6 to 8), dispute settlement (article 9), and then the usual provisions on formalities of an international instrument.

As many delegations are aware, a symposium organized by the International Institute of Space Law was held in connection with the recent 1995 meeting of this body's Legal Subcommittee. At that symposium it was suggested once again that the Legal Subcommittee now take up the topic of space debris on its agenda and that the ILA draft might be a good starting point for relevant discussions.

Finally, it should be pointed out that the Buenos Aires resolution, in addition to adopting the draft instrument on space debris, requested the ILA Space Law Committee to re-examine the 1984 ILA Draft Convention on the Settlement of Space Law Disputes to determine whether developments since 1984 require any changes or the drafting of a new instrument, and also to examine in that context what further steps should be taken to promote the peaceful settlement of disputes regarding space activities. This examination is under way in the ILA Space Law Committee, and if any delegation has any suggestions or comments in this regard, we would be happy to receive them and take them into account for the report we plan to submit to the ILA Conference to be held in Helsinki in 1996.

The meeting rose at 12.30 p.m.

United Nations A/AC.105/PV.408

General Assembly

Official Records

Committee on the Peaceful Uses of Outer Space

408th Meeting
Friday, 28 July 1995, 10 a.m.
Vienna

Chairman: Mr. Hohenfellner . . . . . (Austria)

The meeting was called to order at 10.05 a.m.

Attendance by non-members of the Committee

The Chairman: I should like to inform members that I have received *notes-verbales* from the delegation of Panama, in which it requests permission to attend the current session of the Committee on the Peaceful Uses of Outer Space as an observer. I therefore suggest that, in conformity with past practice, we invite that delegation to attend the current session and to address the Committee as appropriate. This, of course, is without prejudice to further requests of this nature and does not involve any decision by the Committee concerning status. It is a courtesy we customarily extend to delegations.

If there is no objection, we shall proceed accordingly.

It was so decided.

General exchange of views *(continued)*

Mr. Maclure (United States of America): In addressing the Committee for the first time, my delegation extends its welcome to you, Sir, on your return as Chairman of the Committee. We expect that all delegations will benefit from your knowledge and experience during this session.

My delegation would also like to congratulate and extend a warm welcome to Ambassador Mazilu of Romania on his assumption of the vice-chairmanship of the Committee.

My delegation would like to take the earliest opportunity at this session to express our concern regarding the maintenance of the principle of consensus in the work of the Committee, and to reiterate for the Committee the views of the United States on this important issue, as delivered at this year's meetings of the Scientific and Technical Subcommittee and the Legal Subcommittee.

To begin, we believe that there can be no doubt that the United States is seriously committed to the work of this Committee and its Subcommittees. Over the past 10 years the United States has made great efforts to contribute to the revitalization of the Committee's work and, in concert with other members, has helped to make the Committee a relevant forum for the promotion of international cooperation in the peaceful uses of outer space.

The commitment of the United States has been underscored by its efforts over the years to provide and exchange information, to participate in and contribute to workshops and special meetings sponsored by the Committee and to make expert presentations on state-of-the-art developments in space science technology and applications.

With these facts in mind, my delegation wishes all to recall that during last year's session of the General Assembly the principle of consensus was abandoned on a Committee question through the introduction of a separate draft resolution. Until last year this Committee maintained consensus as the sole basis for effectively

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conducting its work. It cannot be too often or too strongly emphasized that the Committee was established with a commitment to achieving what was achievable through consensus. Unfortunately, there always have been sceptics in this forum with little enthusiasm for the exercise of the principle of consensus.

During the forty-ninth session of the General Assembly the United States was unable to support the separate draft resolution because it did not reflect the consensus agreement reached at last year's session of the Committee, clearly recorded in paragraphs 156 and 157 of the Committee's report (A/49/20).

Last year the United States fully expected that the consensus agreement reached in this Committee would subsequently be honoured by all in the General Assembly. It is regrettable that the final hours of the General Assembly, instead, saw the Committee's principle of consensus discarded.

The United States continues to believe that the principle of consensus is the only basis on which the Committee and its Subcommittees can work and is the only basis on which the United States can productively participate in the work of the Committee.

Having made that point, my delegation would like to comment briefly on the Committee's activities during the past year.

My delegation wishes to note that there have been some positive developments that deserve mention. The United States finds the level of cooperation, compromise and consensus exercised in the two Subcommittees earlier this year to be encouraging. The spirit expressed and the effort expended by all members bode well for the future success of the Committee.

Accomplishments in the work of the Subcommittees have been due, in part, to the current state of international affairs, where a global tide of political and social change is infusing member States with optimism and presenting new opportunities for cooperation in the peaceful uses of outer space. A significant and auspicious example of this new wave in relationships was the spectacular on-orbit rendezvous earlier this year of the Shuttle and Mir spacecraft — an event that demonstrated for the world community the potential of the nexus of technology and good will.

Optimistic and cooperative attitudes led to the successful organization of a multi-year work plan for the agenda item on space debris in the Scientific and Technical Subcommittee. This plan will contribute to the establishment of the firm scientific and technical understanding necessary for any future action on the complex attributes of space debris. The United States continues to believe, however, that it is not appropriate to discuss the issue of debris in the Legal Subcommittee, or to develop recommendations in the Scientific and Technical Subcommittee to underpin new legal norms for debris, until such scientific and technical understanding is achieved.

The Subcommittee session also was rich with scientific and technical presentations by many delegations. Such exchange of information reinforces my delegation's view that the Committee is on the right track in pursuing scientific and technical understanding in all aspects of its work. My delegation will have additional comments on the report of the Subcommittee under agenda item 5.

The forum of the Legal Subcommittee also saw success in its debate this year. Perhaps most importantly, progress was made in the Subcommittee on the perennial issue of the organization of its work. Committee members have always agreed that efforts to strengthen their cooperation also imply the need for ongoing improvement in the working methods of the Committee and its Subcommittees. The United States is gratified at and applauds the course followed by the Subcommittee in agreeing to take action on specific issues, including the length of the session and the use of conference services, that will improve the Subcommittee's efficiency and ultimate effectiveness. My delegation will again address the Subcommittee's activities under agenda item 6.

Finally, my delegation would like to laud the Committee's efforts in arranging for numerous workshops, seminars and training programmes that have brought the beneficial applications of space science and technology to nations and regions around the world. During this session, under agenda item 8, on the spin-off benefits of space technology, the Committee will discuss how the use and exploration of outer space can enrich peoples' lives in many practical and beneficial ways.

In this regard, my delegation is pleased to note that the United States will host — in cooperation with the

Office for Outer Space Affairs — an international spin-off conference next year. With reference to this and other activities, my delegation wishes once again to express its great appreciation for the untiring work of Dr. Abiodun and his United Nations Programme on Space Applications.

During the next two weeks the Committee will once again be challenged with broadening the opportunities for and deepening cooperation in the peaceful uses of outer space. My delegation expects that the Committee will take full advantage of these opportunities and avoid extraneous issues, such as disarmament, that have created contention in the past.

The United States believes that the spirit of cooperation, compromise and consensus can again thrive in the Committee's thirty-eighth session, can serve as a fitting tribute to the United Nations on its fiftieth anniversary and can realize the potential for good in humankind's manifest destiny on the final frontier of space. The United States looks forward with great expectations.

Mr. Sölendil (Turkey): Allow me to congratulate you, Sir, on your continued chairmanship of the Committee on the Peaceful Uses of Outer Space (COPUOS). My delegation has full confidence that under your usual able leadership, this session also will achieve successful results. I wish also to congratulate Ambassador Mazilu of Romania on his election as Vice-Chairman. I am sure we will benefit from his wise leadership as well.

My delegation also extends its appreciation to the Secretariat — Mr. Jasentuliyana and his staff — for their excellent work in preparing this session as well as past sessions of the Subcommittees. We wish also to express our gratitude to Professor Carver, who is retiring from the chairmanship of the Scientific and Technical Subcommittee. We wish him the very best.

As a member of COPUOS since 1977, Turkey has been deeply interested, and has actively participated, in its work. My country does not have a long history of space activities, but both the legal and scientific aspects are followed carefully by the Turkish authorities, and institutional arrangements are made to respond efficiently to the requirements of those activities.

As you mentioned in your opening statement yesterday, Mr. Chairman, the first national telecommunications satellite, TURKSAT 1-B, owned and to be operated by the Turkish Telekom Company, was launched in July 1994. The satellite carried 16 transformers, which operate in Ku-bands and cover three geographical regions. These are centred over Turkey, Western Europe and Central Asia. TURKSAT 1-B provides services such as direct television and radio broadcasting, telephone, fax, data and telex services via IBS stations, support of private networks of banks, hotels and airlines, remote control systems, diplomatic correspondence and security services. Television reception by 60- to 120-centimetre antennas is possible to accommodate five State-owned and dozens of private television channels in Turkey.

We share the view that remote-sensing activities should take into account the need to provide appropriate and non-discriminatory assistance to meet the needs of the developing countries, and that remote-sensing data and analysed information should be made available to all countries at a reasonable cost and in a timely manner, including those from operational meteorological satellites.

We agree in principle with the multi-year work plan on space debris adopted by the Scientific and Technical Subcommittee at its last session. We also agree that international cooperation is necessary to develop appropriate and effective strategies to minimize the potential impact of space debris on future space missions. It is important to provide for the prevention of further pollution of space by space debris. For instance, a system could be developed in which a satellite could use a certain amount of its remaining fuel to lift itself up to a higher orbit as it approaches the end of its active life. We should also, however, pay due attention to the work carried out by the International Law Association (ILA).

My delegation is happy to see that significant progress has been made on the issue of the definition and delimitation of outer space through the production, at the last session of the Legal Subcommittee, of a compromise questionnaire to seek the views of the member States. We are equally glad to observe that two individual working papers on the Principles regarding international cooperation in the exploration and utilization of outer space were merged into one text by the Chairman of the relevant Working Group, also during the last session of the Legal Subcommittee. We believe that this positive step will contribute to further progress on this issue.

Useful ideas were put forward this morning by our Austrian colleague on the prospect of convening a third United Nations Conference on the Exploration and Peaceful Uses of Outer Space. Also, our Brazilian colleague pointed out, quite rightly, that such a

conference should benefit from the support of all those concerned. The report of the Working Group provides a good basis for further elaboration of the idea. We also appreciate the views of all other delegations on this issue.

My delegation believes that the Committee and its Subcommittees constitute the proper forums for discussion, interaction and exchange of experience and information in order to formulate the necessary guidelines for space activities, which have great significance for humankind. We are prepared to join in efforts to render the work of the Committee more effective and efficient, through the Working Group to convene during the present session.

In conclusion, I wish to reiterate that the Turkish authorities sincerely desire to cooperate, at the regional and international levels, with all who are interested.

Mr. Lessard (Canada): I should like, Sir, on behalf of my delegation, to express our pleasure at seeing you chair this Committee once again, and also to thank you for this opportunity to summarize recent developments in Canada's space activities, to highlight a few key events scheduled for 1995 and beyond, and to emphasize once again Canada's commitment to peaceful international cooperation in space.

I should like to start by echoing the sentiments of other delegations in welcoming the new members of the Committee on the Peaceful Uses of Outer Space (COPUOS). I am certain that their contribution will become important as the Committee addresses the issues on its agenda, now and in future.

The last few years have witnessed the convergence of a number of factors that have increased both the possibility of, and necessity for, ever greater international cooperation in the study and use of outer space for peaceful purposes. These include the end of the bipolar world, the growing global awareness of the application of space technologies for natural resource management, environmental protection and disaster prevention, the growing fiscal restraint in many regions of the world, and the exponential growth of the so-called information technologies. There is a growing recognition that space technologies and applications are vital in addressing problems affecting the common welfare of humanity. But there is also a practical recognition that nations must cooperate in space matters in order to share the financial costs of space activity and to reap the full benefits of that which is done on the frontiers of human knowledge.

As we head towards the twenty-first century, we foresee many challenges to global and regional security, socioeconomic progress and the health of our environment. Surely, our main collective task, and a prime mandate of this Committee, is to ensure that space science, technologies and systems play a useful role in meeting those challenges, for the benefit of all humankind. As mentioned by the Secretary-General in his exposé on international cooperation in space in the post-cold-war era, this will require the strengthening of existing mechanisms of cooperation and the possible creation of new mechanisms. In this fast-changing environment, new ideas, and new ways of accomplishing objectives, will need to be examined.

I should like to briefly highlight some of the most significant events and achievements in Canada's space programme this past year.

The Canadian Space Agency and other Canadian Governmental departments and agencies involved in space are continuing efforts to implement the new Canadian Space Programme, which was announced in this Committee in June 1994. In all sectors, work is ongoing to define and implement programmes in priority areas for Canada in human space flight, Earth observation, satellite communications, space science and space technology development. In particular, progress is being made in further defining such new initiatives as the International Mobile and the Advanced Satellite Communications programmes, for the development of strategic technologies for international mobile communications and new multimedia applications respectively, and also the Canadian Small Scientific Satellite Programme, which will see the launch of two Canadian small satellites for scientific applications in the next 10 years.

The Canadian Space Agency, in collaboration with the Centre National d'Etudes Spatiales of France, has recently made important discoveries with the Wind Imaging Interferometer (WINDII). Data from this instrument, flown in 1991 on board a United States satellite, shows that planetary scale disturbances in the upper atmospheric weather correspond to one or two waves around the globe. These disturbances resemble weather patterns, but clearly demonstrate that the upper atmosphere responds to processes arising at the Earth's surface. WINDII also discovered a gap in atomic oxygen at the equator, thought to be due to the action of atmospheric tides and associated winds.

Canadian scientists participated with scientists from the European Space Agency (ESA), the United States National Aeronautics and Space Administration (NASA), Japan, France and Germany in the second International Microgravity Laboratory (IML-2) mission launched last July. Some 80 studies were conducted on the effects microgravity produces on astronauts, including back pain, changes in nerve conduction, and changes to the cardiovascular system.

Canada also continued its very fruitful cooperation with the European Space Agency in several areas. Initiated in the early 1970s, this collaboration was formalized in 1979 with the signing of an agreement on close cooperation, and has resulted in substantial benefits. In the past few months, Canada has confirmed its participation in new programmes, particularly in the area of satellite communications. Canada is also gratified by the successful launch on 21 April 1995 of the second European Remote Sensing Satellite, a programme in which Canada participated. We look forward to many years of successful operations from this spacecraft.

And, finally, work is continuing on the development of the Mobile Servicing System, Canada's contribution to the largest international cooperative science and technology project in history, the International Space Station Alpha. The Mobile Servicing System is a sophisticated robotics instrument that will play a dominant role in the assembly, maintenance and operation of the Space Station, in which Canada is a partner with the United States, participating European States, Japan, and now Russia. Canada looks forward to the upcoming completion of the discussions necessary in particular to bring Russia formally into the partnership, and also to the confirmation this autumn by the European partner of its contribution to the project.

I would also like to mention briefly some of the key events in Canada's space programme for the coming year. Perhaps the most significant event of 1995 will be the launch of RADARSAT I, Canada's first Earth observation satellite, on 20 September. RADARSAT I will use synthetic aperture radar (SAR) technology to observe the Earth, even in darkness and through clouds, providing data essential to a variety of applications for resource management and environmental monitoring, such as ice observations, crop predictions, and the monitoring of deforestation and desertification. Radarsat International, the private Canadian company entrusted with the mandate of commercializing this data world wide, will embark soon after the launch on a tour of several cities in all regions, to demonstrate the applications of this data to potential users. This will build on the very successful SAREX and Globesar airborne observation campaigns undertaken in several regions of the world. We have also started planning for the development of the second RADARSAT satellite for launch around the year 2000, and discussions will continue with the Canadian private sector on the formation of a consortium which will lead this effort and supplement available federal funding.

Canada will also launch this year or early next year a spacecraft called MSAT, an advanced communications satellite that will provide Canadians, especially in rural areas, with the same communications services as those enjoyed in metropolitan centres. This project is a cooperative venture involving Canadian and United States private sector partners and will provide two-way voice, data transmission, facsimile and dispatch radio services to users, whether on land, at sea or in the air.

I would now like to note the activities of three of Canada's astronauts this year. Canada's Dave Williams has recently been selected by NASA as part of the 1994 class of mission specialist trainees. Chris Hadfield will take part in the Shuttle mission STS-74 that will dock with Russia's MIR station in late 1995 and will operate the Canadian robotic arm in order to put into place the docking adaptor that will allow repeated Shuttle missions to MIR. Mr. Hadfield will be the first Canadian in a Russian spacecraft. And Dr. Bob Thirsk was recently selected as a payload specialist for Space Shuttle flight STS-78 following a rigorous international selection process involving astronauts from several countries. STS-78 will be a life and microgravity sciences Spacelab mission. Finally, Canada looks forward to welcoming all members and affiliates of the Committee on Earth Observation Satellites (CEOS) to the plenary session scheduled for 11 to 13 October 1995 at the site of the Canadian Space Agency in St. Hubert. Canada assumes the Chair of CEOS in 1995, following the very successful German chairmanship last year.

International cooperation has always been the mainstay of Canadian activity in space, and we expect that such cooperation will increase. Indeed, we anticipate that several new opportunities for enhanced collaboration with foreign industrial and governmental partners will emerge in the implementation of the new Canadian space programme, particularly in the fields of space science, space technology development, Earth observation, and space and ground infrastructure. We welcome any suggestions as to how cooperation in space activities can be enhanced for the common benefit.

Canada intends to make more specific statements on the issues raised in the reports of the two Subcommittees. I would, however, like at this time to express my delegation's satisfaction at the progress made at the last session of the Scientific and Technical Subcommittee towards the development of a specific, deliberate, multi-year work plan on the phenomenon of space debris. Like other delegations, we believe that space debris poses a serious threat to the continued secure and cost-effective conduct of space activities, and requires the immediate consideration and implementation of practical measures to alleviate the problem.

On the issue of the working methods of the Committee and its Subcommittees, my delegation can only welcome the recent discussions aimed at further implementing the principle of flexibility for the conduct of meetings. We reiterate our belief that, despite — or perhaps because of — its reliance on compromise, the principle of consensus is vital to the continued successful pursuit of deliberations and should remain a cornerstone. I would also like to express our conviction that the environment of space activities has undergone and is still undergoing significant changes. New trends are emerging, and new challenges are confronting us. My delegation would therefore support the continued effort to examine the agenda of the Committee and its Subcommittees, but in particular that of the Legal Subcommittee, so that productive consideration of relevant issues can be promoted.

Once again, my delegation would like to emphasize the very important contribution of this Committee, its two Subcommittees, and the Director and staff of the Office for Outer Space Affairs in leading international consideration of these and other important issues. I can assure you, Mr. Chairman, of my delegation's continued cooperation.

The Chairman: I now have the honour and pleasure of calling on Mr. Giorgio Giacomelli, Director-General of the United Nations Office at Vienna, who would like to make a statement, which proves the interest he takes in our Committee's work.

Mr. Giacomelli (Director-General, United Nations Office at Vienna): As Director-General of the United Nations Office at Vienna (UNOV), of which the Office for Outer Space Affairs is an integral part, I find it indeed a great pleasure to welcome you all to Vienna for this, the thirty-eighth session of the Committee on the Peaceful Uses of Outer Space and the second session to be held here at the Vienna International Centre.

I am pleased to note that the Office for Outer Space Affairs is fully settled in its new home and that it has been fully integrated into the operations of the UNOV. The Office works closely with other Vienna-based units, particularly the joint United Nations/United Nations Industrial Development Organization Conference Services Division, which enables it to provide such excellent substantive support to this Committee and its two Subcommittees. The relocation of the Office has also resulted in enhanced cooperation with the space authorities of the host country and with other Europe-based organizations, particularly the European Space Agency.

The work of this Committee and its two Subcommittees is extremely important to the entire United Nations Organization, and it will likely become even more so in the future as space technologies and applications are further developed. The fact that space technology has become a part of our everyday lives in the span of just a few short years merely serves to cement in my mind the conviction that it will become indispensable as we approach the twenty-first century.

Of course, the primary challenge to this Committee, and indeed to the entire United Nations system, is to see that all countries share equally in the benefits of space technologies. It is important that space technology not become yet another tool by which the gap between the developed and developing countries is widened. The Committee must also address other challenges, such as the need to minimize the potentially adverse impact of space activities, such as the generation of space debris and the possible contamination of the space and Earth environments from space objects with nuclear-power sources. The Committee must also face the potentially contradictory desires of countries for increased bilateral cooperation in space activities with the increased desire for multilateral cooperation, particularly through the United Nations. This is no small task, but, judging by the significant past achievements of this Committee, particularly with regard to the development of international space law, I am confident that it will be successful in this endeavour.

In order to ensure the continued peaceful exploration and utilization of outer space, member States will need the full support of the United Nations and I would like, at this point, to reiterate the Organization's commitment to this goal. The Secretary-General's major policy statement on space activities, the report entitled "International cooperation in space activities for

enhancing security in the post-cold war era", noted that all forms of security — political, economic and environmental — are interrelated. Indeed, in other recent policy statements, such as "An Agenda for Peace" and "An Agenda for Development", the Secretary-General has noted the connection between security and development and stressed that the Organization's activities in one area must be explicitly linked to its efforts in the other. In essence, promoting development will contribute to the promotion of international peace and security.

The 1992 United Nations Conference on Environment and Development, the first in the ongoing continuum of global conferences to focus on economic, social and development issues, was one of the first international forums specifically to note the important role that space technology can play in promoting the sustainable development of the Earth's natural resources. Indeed, the landmark Agenda 21 programme of action called for improved coordination and cooperation in the use of space technology, particularly remote sensing, for implementing the recommendations of the Conference. Of course, this is something that this Committee has been advocating and which member States have been actively pursuing for many years.

In fact, I like to think often of one of the better-known contemporary Italian sculptors, Pomodoro. I do not know if many here are familiar with his work. One of the patterns that seem to have obsessed him is a globe — the Earth, in fact — carved cruelly by the sometimes unwise eagerness of human beings. What he missed is what we are doing and building, not on the crust of our globe but in what is so closely related to it: outer space. I think he should take inspiration from this new dimension.

This leads me to mention what I view as the greatest challenge facing this Committee: the need to lead the effort more fully to integrate space technologies into the work of the Organization. In this regard, I would like to note that, since its relocation to Vienna in October 1993, the Office for Outer Space Affairs has made every effort to assist the other United Nations divisions that are located here to utilize space technologies in their work programmes.

Two examples immediately come to mind. First and foremost, in my view, are the ongoing discussions between the United Nations International Drug Control Programme (UNDCP) and the Office for Outer Space Affairs on how remote sensing can be utilized by Member States and regional organizations in their fight against the cultivation of illegal drugs. It is hoped that these discussions will yield a substantive programme in the near future.

As many members are aware, the United Nations attaches great importance to international efforts to stem the production and use of illegal drugs. The link between the international drug trade and other forms of transnational criminal activity was a focus of recent United Nations conferences and will continue to be a priority area of the United Nations Drug Control Programme and the Crime Branch, both of which are based in Vienna.

As Executive-Director of the UNDCP, I have a deep personal interest in how remote sensing can be used in the fight against this global scourge. I therefore view the ongoing discussions between the Office for Outer Space Affairs and the Drug Control Programme as an example of the multiplier effect that can be gained by combining the expertise available among the varied United Nations units and look forward to other developments of this kind.

Another example of how space technology and expertise are being integrated into the operations of the Organization was the development by the Office for Outer Space Affairs of a plan to use a combination of satellite and computer-based telecommunications systems for the electronic transmission of documents, which facilitated the remote translation and transmission of documents for the Ninth United Nations Congress on the Prevention of Crime and the Treatment of Offenders, held recently in Cairo. This marked the first time ever in the Organization's history that documents were edited and translated away from the site of a conference on an operational basis, and the success of the project, due in large part to the efforts of the Office for Outer Space Affairs and the willingness of the Office of Conference and Support Services to undertake this experiment, makes it likely that such "tele-conferencing" will become a regular feature of future United Nations conferences. It should be noted, of course, that significant cost savings accrued to the Organization and the host country because fewer conference servicing staff were required to make the trip from Vienna to Cairo.

Clearly, space technology could play a valuable role in many other United Nations programmes and projects, particularly those related to implementation of the

recommendations contained in "An Agenda for Peace" and "An Agenda for Development" and those of the global conferences.

It should be noted, of course, that space technology is already utilized by many parts of the Organization and many of the specialized agencies in fulfilling their mandates. In this regard, the Office for Outer Space Affairs, as host and organizer of the annual Inter-Agency Meeting on Outer Space Activities, plays an important role in coordinating all the space-related activities of the Organization and ensuring that there is no unnecessary duplication of effort.

Nevertheless, it is important that more be done to ensure a firm link between the work of the Committee and that of the rest of the United Nations. A review of this issue will be conducted in the context of the formulation of the medium-term plan for 1998-2001, and it is important that the Committee support and provide input to this process. I assure the Committee that all of the Offices that fall under the umbrella of the United Nations Office at Vienna will be undertaking similar reviews in the coming months to ensure that all activities conducted here are consistent with the overall direction and policy goals laid out by the Secretary-General and the General Assembly. It is especially important for the Committee to consider ways to establish a more definitive link between the activities organized under the Programme on Space Applications and the goals outlined by the Secretary-General and the global conferences.

By firmly aligning all elements of the Committee's work with the overall goals of the Organization, this body will greatly facilitate the integration of space technology into all relevant parts of the work of the United Nations and in doing so will be fulfilling its mandate to serve as the focal point for international cooperation in the peaceful uses of outer space.

With regard to this Committee, I am aware of its consideration of the possibility of convening a Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III). In the context of the discussions already held on this matter, I understand that the Committee and its Scientific and Technical Subcommittee have addressed some of the issues I have raised, particularly the need to ensure consistency and to give focus to all international space activities, especially those conducted under the auspices of the United Nations. I am sure that as the Committee progresses further in the preparations for a UNISPACE III it will continue to give its attention to these important matters.

As members of the Committee know, the fiftieth anniversary of the United Nations will be marked by many special events. Among these, however, none will be more exceptional than the planned tele-conference between the Secretary-General and the astronauts and cosmonauts aboard the second joint Space Shuttle-Mir space station mission, which will take place in October this year. This event will give us an opportunity to reflect on the Organization's achievements in the field of space and to contemplate its future role in this important area.

Again I thank the Committee for giving me the opportunity to address it. I wish all members a pleasant stay in Vienna and a successful and productive session. I shall, of course, follow the Committee's deliberations with interest, and I look forward to welcoming all members again at future sessions.

The Chairman: I thank Mr. Giacomelli, first, for his kindness in addressing the Committee and his interest in our work; secondly, for his inspiring ideas concerning the environment and the applied technology of remote sensing for the drugs programme, which is a very important factor; and, last but not least, for what he has said about tele-conferences. In this context, I believe that Vienna was a pioneer in international conference technology.

I hope that we can establish a tradition and that the Director-General of the Vienna Office will address the Committee when it meets next year.

As Mr. Giacomelli is under pressure of time it was necessary that he address the Committee before the representative of Argentina, to whom I apologize.

Mr. Varotto (Argentina) (*interpretation from Spanish*): Since this is the first time the Argentine delegation has spoken at this session, we should like to express our satisfaction at seeing you, Mr. Chairman, once again presiding over the Committee. We also wish to express our gratitude to the Office for Outer Space Affairs for the documents prepared for the session.

As you, Mr. Chairman, correctly said in your introductory statement, in the year that has passed since the last session of the Committee on the Peaceful Uses of Outer Space Affairs, various events in the area of space

activities have warranted attention and presented new challenges to the Committee. These events demonstrate once again the evolutionary and changing nature of space activities, which requires the Committee to take a flexible and dynamic approach in its work. Our delegation will take an active part in discussions on the procedures and methods of work of the Committee and its two Subcommittees, with a view to adapting them to those necessities.

These notions are also valid for national space programmes, because those programmes, too, constantly have to face new and changing circumstances. Concepts such as active cooperation, joint projects and the interdependence of technical, political and economic elements define the parameters of current international relations in the field of space. For this reason, the Argentine Republic has adapted its structure and legislation in the field of space to fit these realities. This is reflected in the eminently civilian nature of its space programme and of its corresponding legal and political structure.

This new approach gives priority to a better interrelationship between our national interests, our available human and material resources, and our search for more extensive interaction with other countries.

For that purpose, in 1991 the Government and the Congress of our nation took the decision to organize space activities by setting up the Comisión Nacional de Actividades Espaciales (CONAE), which reports to the highest level of the Executive branch. Absolutely civilian in nature, it is intended for exclusively peaceful uses of outer space. In conformity with our existing national legislation, CONAE prepared the National Space Plan for the period 1995 to 2006, which the Government adopted in November 1994, while declaring space activities a national priority in the sphere of science and technology. The National Space Plan, which is to be reviewed every two years, will be in force for 11 years, during which it will keep its priority status.

Let me comment on some features of Argentina's National Space Plan. Various factors, both central and tangential, were considered in drafting the Plan, including, first, the nature of our country; because of its size, its principal agricultural and mining activities, its population distribution, its vulnerability to natural disasters, its level of scientific, technological and economic development and its participation in a number of international agreements, Argentina can be called a space country. This compels Argentina to use space science and technology.

The second factor was the globalization of technology, which is both cause and effect of what is today called the globalization of the economy. Moreover, there was broad consensus in the political, scientific, technological and industrial sectors that Argentina should be an active user of space science and technology.

The third factor was the view that it was in our country's best interests to create what we have come to call complete cycles of space information and that in order to create such cycles of information Argentina not only had to use what was internationally available in the context of the globalization of technology, but also had to participate actively in the production of certain elements of the cycle if it was to be complete.

Finally, the main resource needed for space activities — trained personnel — could be assured both through currently available means and through well-conceived plans for training activities. The existence of an appropriate cultural environment in which those who provide scientific knowledge, those who create technology and those who produce goods and provide services could work in concert would ensure that the scientific and technological sector could meet the needs of the manufacturing and space sectors, and vice versa, so long as we chose correctly the complete cycle of information to be generated at an economically appropriate time. We only needed to take the actions that would make the country aware of this.

These and other factors went into the preparation of our National Space Plan, which is intended as an investment project in all its stages, in scientific aspects and applications aspects, and we have been able to make reasonable predictions of the country's return on its investments in the space field.

Our Space Plan's identification of Argentina's interest in generating complete cycles of space information implies the need for its implementation to facilitate international cooperation in the form of partnerships. Such cooperation by Argentina was usual even before the adoption of the National Space Plan. One of the best examples of this is the scientific applications satellite SAC-B, to be launched within a few months. This project, typical of international cooperation, involved Argentina's CONAE, the United States National Aeronautics and Space Administration (NASA), the Italian Space Agency and Brazil's Institute of Space Research (INPE).

Argentina's National Space Plan calls for a series of satellite missions divided into two series of light satellites: the SAC series, which will have both scientific and applications aspects, with emphasis on remote sensing in the visible-light range, and the SAOCOM series, essentially applications-oriented, with emphasis on the microwave range. In the SAC series, the SAC-C satellite is already fully functional; this, too, is a cooperative project in which the SAC-B partners and a country whose participation is under consideration are joined by the Danish Meteorological Institute, which will provide a magnetometer with a resolution similar to that used in the Oersted project. The launch of SAC-C is planned for 1998.

On the terrestrial side, the National Space Plan proposes the construction and operation of two kinds of receiving stations. The first would be a general-purpose station for all satellites from which Argentina is interested in obtaining information, principally in the microwave and visible bands. This station will require a high signal-to-noise ratio in its receiving system and high gain in the relevant antenna. Through additional improvements, these features will make it possible for this station to be used also as a high-quality radioastronomy station; it will thus be a multi-purpose station.

The second class will consist of low-cost, compact receiving stations that will enable users to obtain some of the information available from satellites for their own immediate use. The use of these stations in our national territory will be widely promoted by our organization.

As to personnel training, the National Space Plan envisages continued support for the activities of the country's various university centres. It also establishes the Mario Gulich Institute for Higher Space Studies, which we hope will play a significant role in training highly specialized professionals. The Institute will operate at the Falda del Carmen installations as a result of the decision of the Argentine Government to cancel completely the Condor project. Two aspects of that facility are undergoing conversion: first, the actual production plant is being converted for the use of its facilities by technological enterprises; and, secondly, Argentina's space activities will be concentrated in Falda del Carmen.

For the organization and operation of the Mario Gulich Institute, we are counting on international academic cooperation. The Institute will, of course, be open to students from other countries, in the tradition of our country's other centres of excellence in higher education, such as the Instituto Balseiro, which has served Argentina and Latin America so well in the training of nuclear physicists and engineers.

In this statement we wanted to give a general overview of Argentina's space activities and their place in relation to the international community. Later in the session my delegation will be addressing the Committee on specific items of the agenda.

Mr. Dziovbenko (Russian Federation) *(interpretation from Russian):* Mr. Chairman, my delegation would like to express its satisfaction at seeing you once again presiding over the Committee at its thirty-eighth session. We should also like to congratulate the representative of Romania on his election as Vice-Chairman. We are sure that he will make a significant contribution to the effectiveness of our work. Allow me also to welcome the other officers of the Committee and the representatives of the Secretariat, whose excellent work always ensures the successful conduct and conclusion of our work.

The results of the activity of the United Nations Committee on the Peaceful Uses of Outer Space in serving the interests of mankind are well known. In our view, they basically respond to the tasks which are posed by life itself. At the same time, there have recently been changes in the criteria for finding the rationality and effectiveness of the work and, correspondingly, to some extent, a need for renewal.

In this year of the fiftieth anniversary of the United Nations, bearing in mind the new conditions and circumstances which have emerged in the world, including reductions in the levels of suspicion in the post-confrontational era, we think it would make good sense if we were all to concentrate our attention on ways and means of renewing the work of the Committee and of seeking agreement in improving the effectiveness of its work. Of course, in our view, we should not reject the fully justified principles of our work — in particular, the principle of deciding questions on the basis of consensus. We shall speak in detail on this subject on agenda items 5 and 6 and other items.

With regard to the holding of a conference, at this stage we would simply note that we could support this suggestion but on condition that the conference is properly prepared and that its agenda and format is balanced in the interests of all. We will speak in greater detail on this under the corresponding agenda item.

Mr. Chairman, my delegation listened with great interest yesterday to your excellent introductory statement, which set out the basic results of world space activity over the last year and gave an analysis of work which had been carried out, trends noted and ways of developing international space activities and readiness, under the auspices of the United Nations, to solve problems that are vitally important to mankind in this sphere. You cited a number of specific examples of cooperation in space, including a number of Russian programmes. However, following the established tradition, we should like to give a little more detail about the status of trends and plans for the further development of space activities in Russia.

Russia is able to systematically carry out each year 40 or 50 launches of launch vehicles and to maintain in space a stable orbiting group, which includes some 170 space craft linked into 30 types of space systems and complexes. Using these, various types of information are transmitted to more than 20 Russian federal departments and to hundreds of organizations in our country. Over just five months of this year, there have already been more than 10 launches of launch vehicles, and 13 space craft have been put into orbit for different purposes. They include the Spectre Module, with international scientific apparatus on board. This was the fourth specialized module weighing some 20 tons, of the eighteenth major expedition of the Mir Space Station, which has been in operation since 1986. The mass of the entire configuration of the Mir Space Station is now at a record level now - around 130 tons.

In your report, Mr. Chairman, you spoke in some detail about manned space flights. Hence, my task is somewhat alleviated; I can simply mention that the United States astronaut, Norman Tagart, working on board the Mir Space Station has already several times broken the record set by his compatriots for length of time spent in orbit. The longest flight for astronauts from other countries was the expedition to the Mir Space Station by a representative of the European Space Agency, Ulf Merbold, last year. As we have already stated, in September we plan to have a flight by yet another representative of the European Space Agency for 135 days.

At the end of June we plan to carry out the first docking of the Shuttle with the Mir Space Station. I should like to recall that this joint task is one element in major preparatory work currently being carried out to implement the programme to establish and operate an international space station. With full participation by Russia we very much hope that there will be rapid agreement with all partners on the specific parameters of interaction on this project with the participation of all current partners and Russia and that this will result in a high quality level of international cooperation in implementing specific and very significant international projects.

With participation by foreign countries in the context of international cooperation, we are now conducting work on planetary exploration — Mars '96, Spectre and others; on astrophysics, space biology and medicine — Bian and Mir; on space meteorology — Meteor 3 and Electro; on environmental monitoring — Almaz and Mir; on rescue systems — Kospas-Sarsat; and a whole set of other areas.

There is also a growing percentage of contract work being jointly carried out by Russia and its partners, including, among a large number of projects, the use of Russian motor assemblies for American launch vehicles; the sale of the Russian Gorizont craft to the firm Ramsat; the use of liquid-fuel rocket motors on Ariane 5; the launch in 1994 of the French biological capsule Ibis; and the creation, together with Germany, of a satellite communications system. Another new project that we find interesting is the testing of a Japanese model of a reusable spacecraft in a unique aerodynamic tunnel in Russia.

We note with satisfaction that our long-standing cooperation with India in space activities has gained new momentum following the signing of an Inter-Governmental Agreement and an inter-agency agreement between the Russian space agency and the Indian Space Research Organization. There are also very promising prospects for cooperation between Russia and Brazil. We also hope to begin, in the relatively near future, joint work with other Latin American countries as well as States in Africa and Asia, both on scientific and applied programmes. Such mutual interest has already been demonstrated.

The radical economic reforms in Russia, in whose territory 85 per cent of the industrial potential of the former Soviet Union is concentrated, have produced a new and important stage in the development of our space activities. For our country's space sector, a period has begun that involves more careful evaluation and the difficult search for alternative solutions. There is now an active stimulus for the formation of new values. Russia is seeking, and is finding, ways of working together with other States in the interests of the international community, to set out on new space courses and to effectively put our unique aerospace potential into action.

I turn now to a subject of very great interest both to Russia and to the rest of the world. Our gateway into space continues to be the Baikonur launch site. We have signed and ratified an agreement between Russia and Kazakstan on basic principles and conditions governing utilization of that launch site and an agreement for its lease. In addition, work is being done towards the broader use of the Plesetsk launch site.

We also have ready a new launching pad for Zenit launch vehicles, and in 1997 we plan to carry out the first launch of the new Rus rocket launcher. We are also working now on the Far East cosmodrome, which is known as Cvobodny. In 1996, we should see the launch of the conversion technology launch vehicle Rokot, which has been constructed on the basis of an intercontinental ballistic missile.

Russia has also completed organizational reforms for national space activities. I should like very briefly to mention that in the State Duma, the federal assembly of the Russian Federation -- our Parliament — we have set up a subcommittee on space, and we are also establishing the corresponding coordinating and managing structures, which report to the President of the Russian Federation.

We will also be reshaping the management structures of the Government. In 1995, we anticipate the further development of legislation in the Russian Federation in terms of space activities and the peaceful uses of outer space, principally through refining, and to some extent reviewing, Russia's laws on space activities. We are looking at laws that apply to rockets and space in general; to commercial space activities; and to interaction with countries of the Commonwealth of Independent States, with other foreign States and international organizations in carrying out our space activities.

Russian space activities now have something to show to mark the fiftieth anniversary of the United Nations. International space cooperation has an increasingly high priority in our space activities. Russia is prepared to extend the area and the scale of such cooperation under the coordinating and guiding rule of the United Nations.

In conclusion, I should like also to say that I shall speak more specifically and in more detail on agenda items relating to specific problems that will be discussed here and that have been raised by our delegation.

Mr. Lemos Simmonds (Colombia) (*interpretation from Spanish*): My delegation is pleased to see you, Sir, once again conducting the discussions of this Committee with your customary rigour and professionalism. We hope that this session will enable us to make progress in the study of each of the items on the agenda and that our conclusions will reflect our desire to continue to move forward and work together to promote international cooperation in the peaceful uses of outer space.

My delegation notes with pleasure that the Director-General of the United Nations Office at Vienna is present in the Committee, albeit very briefly, and takes note of his very important comments. My delegation particularly shares his interest in and emphasis on the use of space technology to combat the production, distribution and consumption of illicit drugs, a phenomenon whose virulent effects on the world are increasing and against which we need to mobilize all the resources available to the States and organizations that make up the United Nations.

The year 1995 has been an important one for the work of the Committee and its subsidiary bodies. First and foremost, we have begun our work with new Member States, which clearly reflects our desire to adapt to changes in the international arena and will also enrich future discussions on all the subjects before us.

Before commenting on some of the major items discussed during the last session of the Scientific and Technical Subcommittee, I should like to take this opportunity to express appreciation to Professor John Carver of Australia, who will be leaving us after his many years of very enthusiastic and dedicated leadership of the discussions of the Scientific and Technical Subcommittee. I wish him all the best in his future activities.

Colombia is confident that if we follow and respect the tradition of the Committee on the Peaceful Uses of Outer Space (COPUOS) of taking decisions by consensus, we will be able to choose the most qualified candidate to continue Professor Carver's important work. My delegation would be very pleased if, at the next session of the Scientific and Technical Subcommittee, a candidate from the Group of 77 were elected to that post, as this would achieve a balance of power at the Committee's management level.

My delegation would like to emphasize, as other States have done, the importance it attaches to the study of the item on space debris, and would like also to express its satisfaction at the inclusion of such an

important subject on the agenda of the Scientific and Technical Subcommittee at its last session. We would consider it appropriate for the Legal Subcommittee to undertake in some way the study of this item.

Almost 13 years have passed since the second United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE 82) was held, and during that time much progress has been made in science and space technology, as well as in international affairs. Colombia considers it necessary to hold a third UNISPACE conference to evaluate progress already made and set out guidelines for the future work of all bodies and institutions committed to the preservation of peace in outer space.

My delegation believes, nevertheless, that in order to guarantee the success of that meeting, an agenda of work that reflects the objectives we hope to attain must be defined jointly, so that we can then proceed to decide on such matters as the site and date of the conference.

The Colombian delegation is satisfied to see the progress made at the last session of the Legal Subcommittee on the subject of the benefits of outer space. As a sponsor of the working paper on Principles regarding International Cooperation in the Exploration and Utilization of Outer Space for Peaceful Purposes, I should like to thank Mr. Edgard Telles Ribeiro of Brazil for his expert presentation of the document on behalf of its sponsors at the last meeting.

I would also like to express appreciation for the work of Mr. Raimundo González of Chile in coordinating the efforts to present for our consideration a document that takes into account the positions of the developed and developing countries and brings us closer to a joint document.

I would now like to refer briefly to the document entitled "Geostationary satellite orbit", which was submitted by my delegation in 1993. I would first like to note gratefully the excellent work of Mr. Eugenio María Curia of Argentina, who led the Working Group on the study of this agenda item, and the progress made during the last session of the Legal Subcommittee.

We believe that all the comments made on this issue contributed significantly to the enrichment of our understanding of this important area of study. Consequently, my delegation now has a more pragmatic and realistic view, which it can use to develop progressively the legislation contained, essentially, in the International Telecommunication Union (ITU) treaties. As we have stated before, we are prepared to present a revised version of the document during the next session of the Legal Subcommittee, in 1996. We shall carry out all the necessary consultations towards this end, principally with the ITU.

To conclude, I should like to wish you, Mr. Chairman, much success in conducting our discussions during this session of the Committee and to express the Colombian delegation's willingness to work with you and take an active part in the tasks we have before us.

Mr. Gavrilenko (Ukraine) (*interpretation from Russian*): I would first like to thank you, Sir, for this opportunity to speak. It is my conviction that under your guidance the thirty-eighth session of the Committee will be able successfully to address the important questions before it. This will effectively demonstrate the good work that is taking place within the United Nations Organization, which is especially significant given the fact that the Organization is now 50 years old.

The end of the confrontation of two world systems which has come about in an unprecedentedly brief period of time has made possible the emergence of new initiatives in which various States work together globally in all sorts of sectors. This must have an impact on one of the most highly developed and technically sophisticated sectors of the world economy: the space sector. The heightening of international cooperation on the peaceful uses of outer space follows naturally from this process. The activity of the Committee on the Peaceful Uses of Outer Space has certainly contributed to this as well. To illustrate this, we could refer to many instances of fruitful cooperation between States in the space sector; indeed, Mr. Chairman, you mentioned them in your introductory statement.

We therefore confirm once again that Ukraine is in favour of further international cooperation in the peaceful uses of outer space, and particularly of the work of this Committee and its Subcommittees in implementing the United Nations Programme on Space Applications and the coordination of the activities of the Committee's members.

A prime example of progress in international cooperation in the development of outer space technology is the series of agreements struck during President Clinton's recent visit to Kiev. Among them was an agreement on the inclusion of a Ukrainian cosmonaut in

the United States National Aeronautics and Space Administration (NASA) manned flight scheduled for 1997. In addition, Ukraine and the United States began negotiations on an agreement to allow Ukraine to enter the American space sector commercial services market.

However, there remains one very complex and important problem for the Committee to address: the monitoring and relief of natural disasters. The United Nations is giving this problem due attention. For example, there was a United Nations conference in Yokohama in 1994 on natural disaster relief. However, a recent series of severe earthquakes -- in Spitak, San Francisco, Neftegorsk and elsewhere — remind mankind of the urgent need to develop efficient methods of forecasting earthquakes.

One such method is remote sensing, which analyses the deep structure of the earth in order to predict earthquakes and prevent their fatal consequences. Here, the Ukraine would like to propose our capabilities for scientific cooperation in this regard.

We would also like to highlight the importance of the timely and open presentation of remote sensing data by all States to all other States, especially of data that is already processed as well as the importance of free access to NETSAT data.

The delegation of Ukraine is in favour of holding UNISPACE 3 very soon. We believe that such a conference would be a catalyst for the development of space sector technology and its further broad application in various regions of the world. It is therefore important to have as many members of the United Nations as possible participate in such a forum, especially those States which are not members of this Committee.

Mr. Mazilu (Romania), Vice-Chairman, took the Chair.

Mr. El Ghernovgui (Morocco) (*interpretation from Arabic*): The Moroccan delegation is pleased to see Mr. Hohenfellner presiding over our work at this session. We are certain that his experience will allow us to achieve success.

I wish to take this opportunity to thank all the members of the Secretariat, and Mr. Jasentuliyana at their head, for the excellent work done in preparation for this meeting.

The field of the peaceful uses of outer space is rapidly advancing and developing, and space technologies are continually evolving. This contributes to the expansion of the space technology sector, with positive effects on many activities in this field. In this respect, the international community has entered a new stage of development because new interests are emerging at the global level in response to these new prospects. It is essential that we make scientific and technical progress in the peaceful uses of outer space while emphasizing transparency and clarity.

As for information on the peaceful uses of outer space and the way in which it can be accessed and exploited to the full in the best possible conditions, this is a matter of major importance to the development of present and future technologies. Studies have shown that the development, progress and prosperity of States, especially the developing and least developed States, are closely linked to the exploitation of these highly advanced technologies.

For some time now the Kingdom of Morocco has been developing remote-sensing technologies. We have established various remote-sensing projects for geographical data in response to our needs for data on natural resources, environmental monitoring, soil preparation projects and so on. These are all integrated into our national development programmes.

Morocco has been interested in the uses of outer space for some time, and has been trying to assimilate space technologies, whose introduction to the developing countries requires a dynamic approach at the national and international levels. In this general framework, Morocco has expressed its desire to participate in COPINE projects specializing in the collection of data, in order to ensure the appropriate exchange of data and information between African States for purposes of international cooperation. This would help to consolidate cooperation between African and European States. In this respect, the Kingdom of Morocco has a very strong infrastructure and good human and institutional resources that will no doubt contribute to the implementation of these projects in Morocco.

Furthermore, Morocco has repeatedly officially declared its interest in hosting a regional centre for space science and technology in Africa. The mission sent to study Morocco's national capabilities in this respect gave

high marks to its human and institutional resources which would enable it to host such a centre.

From 16 to 18 October 1995 Morocco will host the MARISY 95 encounter, which will focus on remote sensing for environmental monitoring purposes. The meeting, organized by the Moroccan Royal Centre for Spaceborne Remote Sensing in collaboration with regional and international organizations, will bring together experts in this field from Africa and the Middle East.

Activities in the field of the peaceful uses of outer space are a double-edged sword, because they not only have positive economic, social and scientific spin-offs, but also entail great dangers that must be kept in mind. This leads us to note that it is necessary to elaborate criteria for focusing on scientific and technical developments for the benefit of all States. Outer space can be utilized peacefully only on the basis of effective international cooperation. Experience shows that scientific and technical progress in the socio-economic and cultural fields can take place only through the consolidation of cooperation. Such cooperation cannot come about through coercion; it must exist only to ensure better standards of living and mutual international understanding. It must seek a common denominator between divergent points of view and interests in order to bring States together, regardless of their levels of technological development. This cooperation must be aimed at utilizing outer space for peaceful purposes.

We need to achieve this sort of cooperation in order to find alternative ways of approaching projects to suit various countries. We should also take into account ways of compensating those countries which do not have the ways and means to tap into the peaceful uses of outer space. The developed countries with advanced technical expertise which exploit this sector of course benefit from such technologies. We must do our utmost to reconcile national and other interests in order to ensure the participation of our countries in outer space developments and to facilitate international cooperation.

With regard to trade and the commercial use of data obtained by remote sensing, we believe that the cost of spin-off information should be reduced to ensure that it is within the means of developing and least developed countries. This would enable all States to benefit from the use of such new technologies.

The study of the problems of space debris and how to deal with them is of particular importance. We must all adopt strategies to control such phenomena and guarantee provision of the resources needed to alleviate the possible negative effects of space debris. With regard to space missions, clearing outer space of debris is a difficult question requiring significant material and economic resources. However, the current scientific data demonstrate that continued research and study can produce positive results — possibly solutions to the difficult problems that we still face. The complex nature of such problems requires that they be addressed in a very precise and fine-tuned manner, and as urgently as possible. Proper, practical and timely measures are required to ensure that some sectors of outer space do not become impenetrable in the near future and to guarantee proper security in those sectors.

The convening of a Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) is of particular importance for the developing countries, as it would enable countries that have recently become connected with the Committee to participate in the examination of various issues concerning international cooperation in outer space. Furthermore, it would allow for the emergence of a global view and new possibilities to consolidate inter-State cooperation following the cold war. This would allow clear political commitments and would prompt us to examine new approaches with respect to early-warning systems. Thus a UNISPACE III would have particular relevance, especially from the space-technology angle. The desired level of international cooperation should be reflected in the convening of a UNISPACE III involving both the developing and the developed countries. Without such unity of effort we can have no hope of achieving true success in our efforts.

The Kingdom of Morocco is convinced that it is necessary to have consensus on these matters. This is the only way to contribute to ensuring close cooperation between all States.

Mr. Kristiarto (Indonesia): At the outset, I should like to express on behalf of my delegation both pleasure and satisfaction that Mr. Peter Hohenfellner is chairing the Committee on the Peaceful Uses of Outer Space at its thirty-eighth session. My delegation has every confidence that under his wise and able guidance this year's session will be run efficiently and will be crowned with success, like the previous ones.

My delegation would like also to express its deep appreciation for the contributions made by both the Chairman of the Scientific and Technical Subcommittee

and the Chairman of the Legal Subcommittee. Their dedicated efforts will undoubtedly result in greater achievements at this session.

The international community has indeed expressed its concern about the need to promote international cooperation in the peaceful uses of outer space, taking into consideration the needs of developing countries. At this juncture my delegation would like to reiterate Indonesia's basic position — that outer space should be used entirely for peaceful purposes and to improve the welfare of mankind. In this connection, my delegation would like to reassert that all space activities should be conducted in such a way as to ensure that the national interest of other nations are not harmed.

Let me now touch upon the issues on our agenda.

It is a commonly held view that the peaceful uses of outer space are inseparable from its non-peaceful uses. The promotion and strengthening of peaceful uses therefore require effective measures to prevent an extension of the arms race into outer space.

In view of this, with regard to the agenda item on ways and means of maintaining outer space for peaceful purposes, I should like to stress the importance of establishing working contact between the United Nations Committee on the Peaceful Uses of Outer Space and the Conference on Disarmament. Through such contact, exchanges of information between the two bodies could be conducted, for the benefit of all, in conformity with the principles of the peaceful uses of outer space.

With regard to the report of the Scientific and Technical Subcommittee on the work of its thirty-second session, my delegation would like to focus on several points that we consider deserve appropriate attention. In the field of remote sensing — a view based on experience — that some of the problems faced by developing countries warrant our serious and concerted efforts. I support the Subcommittee's view — this is something that the Chairman mentioned in his opening remark yesterday — that these activities should take into account the need to provide appropriate and non-discriminatory assistance to meet the needs of developing countries.

As regards nuclear power sources, Indonesia shares the concern of some countries over the possible radiation threat arising from the use of nuclear power sources in outer space. In view of this concern, my delegation believes that the use of nuclear power sources in outer space should become the ultimate alternative when the use of other sources is deemed impossible. It is of paramount importance that, in every space programme and activity, attention be given to protecting and sustaining the space environment, particularly those elements that affect the Earth's environment.

Concerning space debris, my delegation expresses its satisfaction that the Scientific and Technical Subcommittee has deliberated on this matter on a priority basis, in accordance with General Assembly resolution 49/34. In view of the danger of increased space debris, Indonesia welcomes research and studies conducted by several countries, and expects that the Committee can disseminate the results as well as new data on space debris. In this context, my delegation also gives its support to the multi-year plan adopted by the Subcommittee at its last session.

On behalf of my delegation, I should like to reiterate our concerns about the question of the character and utilization of the geostationary orbit (GSO). It is appropriate to mention our concern about the use of the GSO space as a limited natural resource, as well as the near-Earth orbital space, which is becoming increasingly overcrowded with satellite systems. Many member States have recognized the need for rationality and equity in the guiding principles. In this regard, I would like to reiterate our position that a special *sui generis* regime is required to ensure equitable access by all States, particularly the developing countries. We are confident that the Committee will continue discussing ways and means to address these concerns.

I would like also to take this opportunity to reaffirm our support for the convening of the third UNISPACE, in accordance with General Assembly resolution 48/39. We noted with appreciation the work of the Working Group of the Whole of the Scientific and Technical Subcommittee at its last session, and hope that the result of those endeavours will receive serious consideration from the Committee and be a basic starting point towards the realization of the third UNISPACE.

Finally, it is our fervent hope that the Committee on the Peaceful Uses of Outer Space will play an increasingly strong role in forging links between developing countries and developed countries, as well as between developing countries themselves. It is also our conviction that this cooperation will create opportunities for access to space science and technology.

The Chairman: I now call on the representative of the International Telecommunication Union.

Mr. Kovacs (International Telecommunication Union): I appreciate this opportunity to address the Committee and to introduce the thirty-fourth report of the International Telecommunication Union (ITU) on telecommunications and the peaceful uses of outer space. This report has been distributed to Committee members for information in document A/AC.105/608.

In its first part, the report provides information on the activities of the Union in 1994, while in its second part it includes reports by the member countries of the ITU. In my introduction, I would like to underline those parts which may be of importance to the work of the Committee on the Peaceful Uses of Outer Space and its Subcommittees. These are the issues concerning the ITU regulations on the use of orbit/spectrum resources, contained in the ITU Constitution and Convention as well as in the International Radio Regulations.

The new Constitution and Convention of the International Telecommunication Union, as modified by the Plenipotentiary Conference in Geneva in 1992, entered into force on 1 July 1994. These instruments of the ITU contain the regulatory bases for the allocation of orbit/spectrum resources and their distribution among member countries, the user community. One of the main principles in this regard is laid down in No. 196 of Article 44 of the ITU Constitution, which stipulates:

> "In using frequency bands for radio services, Members shall bear in mind that radio frequencies and the geostationary-satellite orbit are limited natural resources and that they must be used rationally, efficiently and economically, in conformity with the provisions of the Radio Regulations, so that countries or groups of countries may have equitable access to both, taking into account the special needs of the developing countries and the geographical situation of particular countries." (cited p.4, *A/AC.105/608*)

As indicated in this provision, further detailed regulations and procedures governing orbit/spectrum use are contained in the International Radio Regulations, a binding international treaty. The legal regime embodied in the Radio Regulations, which includes the rights and obligations of countries and procedures applicable to all radiocommunication services, has been established by major ITU world radiocommunication conferences.

The present ITU legal regime for the international management of the radio-frequency spectrum and the geostationary orbit stands on four pillars: first, the Table of Frequency Allocations and other related provisions of the Radio Regulations; secondly, the coordination procedures for obtaining the agreement of other administrations concerning frequency and orbit usage; thirdly, the procedures associated with world frequency and orbital position plans; and, fourthly, the notification, publication and recording of frequency assignments in the Master International Register. The final stage for frequency assignments, when they are recorded in the Master Register, is seen as affording international recognition and the right to protection in accordance with the relevant provisions.

In order to put the principles of efficient use and equitable access into effect, two major mechanisms for the sharing of orbit and spectrum resources have been developed and implemented — namely, through, on the one hand, a priori planning procedures to meet the need for equitable access to orbit/spectrum resources and, on the other, coordination procedures with the aim of ensuring efficiency in orbit/spectrum use.

In the process of establishing the ITU's space-related legislation, emphasis was laid from the outset on efficient and rational utilization. This concept was implemented through a "first come, first served" procedure. This procedure of "coordination before use" is based on the principle that the right to use a satellite position is acquired through negotiation with the other administrations concerned by the actual usage of the same portion of the orbital segment. This procedure offers means of achieving efficient spectrum/orbit management; it serves to fill the gaps in the orbit as needs arise and results, in principle, in a homogeneous orbital distribution of space stations.

The progressive exploitation of the orbit/frequency resources and the resulting likelihood of congestion of the geostationary-satellite orbit prompted ITU member countries to consider ever more seriously the question of equitable access in respect of orbit/spectrum resources. This resulted in the creation of frequency/orbital position plans in which a certain amount of frequency spectrum is set aside for future use by all countries, particularly those which are not in a position at present to make use of these resources. These plans, in which each country has a predetermined orbital position associated with the free use at any time of a certain amount of frequency

spectrum, together with the associated procedures, guarantee for each country equitable access to the spectrum/orbit resources, thereby safeguarding their basic rights. Such plans govern a considerable part of the frequency spectrum and the most resource-demanding communication services.

The ITU's legal regime governing the use of the geostationary-satellite orbit is the result of more than 30 years of continuous effort by the ITU member countries. The regulatory framework has been constantly adapted to changing circumstances and has achieved the necessary flexibility in satisfying the two major, but not always compatible, requirements of efficient use and equitable access.

With the dramatic development in telecommunication services, for some time now an increasing demand for spectrum/orbit usage for practically all space-communication services has been observed. In some regions, in the most popular satellite frequency bands, it is becoming increasingly difficult to coordinate satellite networks.

This development is taking place in a rapidly changing technical regulatory and commercial environment. These changes include the liberalization and decentralization of the telecommunication sector, a growing market orientation, an increasing involvement of the private sector and a general globalization and commercialization of communications systems. These elements led the Plenipotentiary Conference of the ITU held in Kyoto in September 1994 to call, under its Resolution 18, for a new, in-depth review of the ITU spectrum/orbit resource allocation procedures.

This review procedure has now been initiated within the Radiocommunication Sector of the ITU. It involves consideration of the basic problems of efficient use of, and equitable access to, the orbit and spectrum resources, but the procedure also comprises the review of other questions, such as the role of national administrations, satellite operators and service providers, dispute-resolution mechanisms, the problem of reservation of orbit capacity without actual use, market considerations and the impact of scientific and technological progress on the spectrum/orbit resource utilization. The results of the review process will be submitted to the World Radiocommunication Conferences to be convened later this year and in 1997 to enable member Governments to further review and revise the legal regime concerning space applications and services.

In addition to those regulatory considerations, the thirty-fourth report of the ITU on "Telecommunication and the Peaceful Uses of Outer Space" contains detailed and specific information on the planned satellite systems which have been notified to the Radiocommunication Bureau of the ITU under the Radio Regulations in force and resolutions of World Radio Conferences. In 1994 the Radiocommunication Bureau received information relating to more than 240 new satellite networks, a substantial increase over the figures of recent years. In addition to traditional space systems, particular interest has also been observed in non-geostationary-satellite networks, providing mobile and personal communications.

In conclusion, I would like to draw attention to the programme of the next two major ITU Conferences, which will be held in 1995 and 1997. Both of these World Radiocommunication Conferences have very important space-related issues on their agenda, which members will find in detail in the ITU report before the Committee. The most important issues of concern are: review, possible simplification and approval of new Radio Regulations; consideration of new frequency allocation requirements and related provisions for geostationary and non-geostationary mobile-satellite services; and revision of the broadcasting-satellite orbit position plans and their associated provisions.

The meeting rose at 5.15 p.m.